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METAPHYSICAL TRACTS

BY

ENGLISH PHILOSOPHERS

OF THE EIGHTEENTH CENTURY.

CONSISTING OF

1. CLAVIS UNIVERSALIS;

2. A SPECIMEN OF TRUE PHILOSOPHY;
By ARTHUR COLLIER.

3. CONJECTURÆ QUÆDAM DE SENSU, MOTU, ET IDEARUM GENERATIONE;

4. AN INQUIRY INTO THE ORIGIN OF HUMAN APPETITES AND AFFECTIONS;

5. MAN IN QUEST OF HIMSELF.

PREPARED FOR THE PRESS BY THE LATE
Rev. SAMUEL PARR, D.D.

LONDON:
EDWARD LUMLEY, 56 CHANCERY LANE.

1837.

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THE present volume, prepared for the press by the late Dr. Parr, was nearly ready for publication when that learned person died. Except the doctor's own copy, now in the library of Mr. Swanston, of the Chancery bar, the whole impression wanted the 141st page at the end of Collier's tracts, as well as those from page 208 of "Man in quest of Himself," to the end. However, by the liberality of Mr. Swanston, this defect has been remedied. The proprietor was induced to purchase the work thus left by Dr. Parr, being about to publish "Memoirs of Arthur Collier," the author of the first two tracts in the collection. As to the authors of the third and fifth tracts, they were doubtless David Hartley and Abraham Tucker respectively. By whom the fourth was penned, he has hitherto failed to discover: he thinks, however, that it probably was written by a Cambridge man and a resident of Lincoln, or the neighbourhood; and he infers this from the dedication, in which Cambridge is made to precede Oxford, as well as from the tract having been originally printed at Lincoln. The proprietor regrets that the printing and the paper are of an inferior kind, and that there are many typographical errors which need correction: he, however, in some degree consoles himself for these defects, by considering, that he is enabled to offer to the reader, at a moderate price, a volume of tracts,

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E. L.

56 *Chancery Lane,*
March 2, 1837.

[i.]

CLAVIS UNIVERSALIS:

OR, A

New Inquiry after TRUTH.

BEING

A DEMONSTRATION

OF THE

Non-Existence, or Impossibility,

OF AN

EXTERNAL WORLD.

By ARTH. COLLIER,

RECTOR OF LANGFORD MAGNA, NEAR SARUM.

Vulgi Assensus & Approbatio circa Materiam Difficilem est certum Argumentum Falsitatis istius Opinionis cui Assentitur.

Mr. Maleb. De Inquir. Verit. Lib. iii. P. 194.

LONDON,

Printed for ROBERT GOSLING, at the Mitre and Crown againſt St. Dunſtan's Church in Fleet-ſtreet. 1713.

THE

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THE

THE

INTRODUCTION,

Wherein the Question in general is explained and stated, and the whole subject divided into two particular heads.

THOUGH I am verily persuaded, that in the whole course of the following treatise, I shall or can have no other adversary, but prejudice; yet, having by me no mechanical engine proper to remove it; nor, being able to invent any other method of attacking it, besides that of fair reason and argument; rather than the world should finish its course without once offering to enquire in what manner it exists, (and for one reason more, which I need not name, unless the end desired were more hopeful;) I am at last, after a ten years pause and deliberation, content to put myself upon the trial of the common reader, without pretending to any better art of gaining him on my side, than that of dry reason and metaphysical demonstration.

The question I am concerned about is in general this, whether there be any such thing as an external world. And my title will suffice to inform my reader, that the negative of this question is the point I am to demonstrate.

In order to which, let us first explain the terms. Accordingly, by *world*, I mean whatsoever is usually understood by the terms, body, extension, space, matter, quantity, &c. if there be any other word in our english tongue, which is synonimous with all or any of these terms. And now nothing remains but the explication of the word *external*.

By this, in general, I understand the same as is usually understood by the words, absolute, self-existent, independent, &c. and this is what I deny of all matter, body, extension, &c.

If this, you will say, be all that I mean by the word external, I am like to meet with no adversary at all, for who has ever affirmed, that matter is self-existent, absolute or independent?

To this I answer, what others hold, or have held in times past, I shall not here inquire. On the contrary, I should be glad to find by the event, that all mankind were agreed in that which I contend for as the truth, viz. that matter is not, cannot be independent, absolute, or self-existent. In the mean time, whether they are so or no, will be tried by this.

Secondly, and more particularly, that by not independent, not absolutely existent, not external, I mean and contend for nothing less, than that all matter, body, extension, &c. exists in, or in dependence on mind, thought, or perception, and that it is not capable of an existence, which is not thus dependant.

This perhaps may awaken another to demand of me how? to which I as readily answer, just how my reader pleases, provided it be somehow. As for instance, we usually say, an accident exists in, or in dependence on, its proper subject; and that its very essence, or reality of its existence, is so to exist. Will this pass for an explication of my assertion? if so, I am content to stand by it, in this sense of the words. Again, we usually say, (and fancy too we know what we mean in saying,) that a body exists in, and also in dependance on, its proper place, so as to exist necessarily in some place or other. Will this description of dependance please my inquisitive reader? If so, I am content to join issue with him, and contend that all matter

exists in, or as much dependantly on, mind, thought, or perception, to the full, as any body exists in place. Nay, I hold the description to be so just and apposite, as if a man should say, a thing is like itself: for I suppose I need not tell my reader, that when I affirm that all matter exists in mind, after the same manner as body exists in place, I mean the very same as if I had said, that mind itself is the place of body, and so its place, as that it is not capable of existing in any other place, or in place after any other manner. Again, lastly, it is a common saying, that an object of perception exists in, or in dependance on, its respective faculty. And of these objects, there are many who will reckon with me, light, sounds, colours, and even some material things, such as trees, houses, &c. which are seen, as we say, in a looking-glass, but which are, or ought to be owned to have no existence but in, or respectively on, the minds or faculties of those who perceive them. But to please all parties at once, I affirm that I know of no manner, in which an object of perception exists in, or on, its respective faculty, which I will not admit in this place, to be a just description of that manner of in-existence, after which all matter that exists, is affirmed by me to exist in mind. Nevertheless, were I to speak my mind freely, I should chuse to compare it to the in-existence of some, rather than some other objects of perception, particularly such as are objects of the sense of vision; and of these, those more especially, which are allowed by others, to exist wholly in the mind or visive faculty; such as objects seen in a looking glass, by men distempered, light-headed, ecstatic, &c. where not only colours, but intire bodies, are perceived or seen. For these cases are exactly parallel, with that existence which I affirm of all matter, body, or extension whatsoever.

Having endeavoured, in as distinct terms as I can, to give my reader notice of what I mean by the proposition I have undertaken the defence of, it will be requisite in the next place, to declare in as plain terms, what I do not mean by it.

Accordingly, I declare in the first place, that in affirming that there is no external world, I make no doubt or question of the existence of bodies, or whether the bodies which are seen exist or not. It is with me a first principle, that whatsoever is seen, is. To deny, or doubt of this, is errant scepticism, and at once unqualifies a man for any part or office of a disputant, or philosopher; so that it will be remembered from this time, that my enquiry is not concerning the existence, but altogether concerning the extra-existence of certain things or objects; or, in other words, what I affirm and contend for, is not that bodies do not exist, or that the external world does not exist, but that such and such bodies, which are supposed to exist, do not exist externally; or in universal terms, that there is no such thing as an external world.

Secondly, I profess and declare, that notwithstanding this my assertion, I am persuaded that I see all bodies just as other folks do; that is, the visible world is seen by me, or, which is the same, seems to me to be as much external or independant, as to its existence, on my mind, self, or visive faculty, as any visible object does, or can be pretended to do or be, to any other person. I have neither, as I know of, another nature, nor another knack of seeing objects, different from other persons, suitable to the hypothesis of their existence which I here contend for. So far from this, that I believe, and am very sure, that this seeming, or (as I shall desire leave to call it) *quasi externeity* of visible objects, is not only the effect of the will of God,

(as it is his will that light and colours should seem to be without the soul, that heat should seem to be in the fire, pain in the hand, &c.) but also that it is a natural and necessary condition of their visibility; I would say, that though God should be supposed to make a world, or any one visible object, which is granted to be not external, yet by the condition of its being seen, it would, and must be *quasi external* to the perceptive faculty; as much so to the full, as is any material object usually seen in this visible world.

Moreover, thirdly, when I affirm that all matter exists dependantly on mind, I am sure my reader will allow me to say, I do not mean by this, that matter or bodies exist in bodies. As for instance, when I affirm or say, that the world, which I see exists in my mind, I cannot be supposed to mean that one body exists in another, or that all the bodies which I see exist in that, which common use has taught me to call my body. I must needs desire to have this remembered, because experience has taught me how apt persons are, or will be, to mistake me in this particular.

Fourthly, when I affirm that this or that visible object exists in, or dependantly on, my mind, or perceptive faculty, I must desire to be understood to mean no more than I say, by the words mind and perceptive faculty. In like manner I would be understood, when I affirm in general, that all matter or body exists in, or dependantly on, mind. I say this to acquit myself from the imputation of holding, that the mind causes its own ideas, or objects of perception; or, lest any one by a mistake should fancy that I affirm, that matter depends for its existence on the will of man, or any creature whatsoever. But now, if any such mistake should arise in another's mind, he has wherewith to rectify it; in as much as I assure him, that by mind,

I mean that part, or act, or faculty of the soul, which is distinguished by the name intellective, or perceptive, as in exclusion of that other part which is distinguished by the term *will*.

Fifthly, when I affirm that all matter exists in mind, or that no matter is external, I do not mean that the world, or any visible object of it, which I (for instance) see, is dependant on the mind of any other person besides myself; or that the world, or matter, which any other person sees, is dependant on mine, or any other person's mind, or faculty of perception. On the contrary, I contend as well as grant, that the world which John sees is external to Peter, and the world which Peter sees is external to John. That is, I hold the thing to be the same in this, as in any other case of sensation; for instance, that of sound. Here two or more persons, who are present at a concert of music, may indeed in some sense be said to hear the same notes or melody; but yet the truth is, that the sound which one hears, is not the very same with the sound which another hears, because the souls or persons are supposed to be different; and therefore, the sound which Peter hears, is external to, or independant on the soul of John, and that which John hears, is external to the soul or person of Peter.

Lastly, when I affirm that no matter is altogether external, but necessarily exists in some mind or other, exemplified and distinguished by the proper names of John, Peter, &c. I have no design to affirm, that every part or particle of matter, which does or can exist, must needs exist in some created mind or other. On the contrary, I believe that infinite worlds might exist, though not one single created, (or rather merely created,) mind were ever in being. And as in fact there are thousands and ten thousands, I believe, and I even contend, that there is an universe, or material world in being,

which is, at least, numerically different from every material world perceived by mere creatures. By this, I mean the great mundane idea of created (or rather twice created) matter, by which all things are produced; or rather, (as my present subject leads me to speak,) by which the great God gives sensations to all his thinking creatures, and by which things that are not, are preserved, and ordered in the same manner as if they were.

And now I presume and hope, that my meaning is sufficiently understood, when I affirm, that all matter which exists, exists in, or dependantly on, mind; or, that there is no such thing as an external world.

Nevertheless, after all the simplicity to which this question seems already to be reduced, I find myself necessitated to divide it into two. For, in order to prove that there is no external world, it must needs be one article to shew that the visible world is not external, and when this is done, though in this all be indeed done, which relates to any opinion yet maintained by men, yet something still is wanting towards a full demonstration of the point at large, and to come up to the universal terms, in which the question is expressed.

Accordingly, I shall proceed in this order. First to shew, that the visible world is not external. Secondly, to demonstrate more at large, or simply, that an external world is a being utterly impossible. Which two shall be the subjects of two distinct parts or books.

PART I.

CHAP. I.

Wherein the first question is considered, viz. Whether the visible World is external or not.

FIRST, then, I affirm that the visible world is not external. By the visible world, I mean every material object, which is, or has been, or can be seen. I say can be seen, (which is the import of the word visible,) in order to comprehend whatever worlds there are, or may be conceived to be, (besides that which we see who live on this earth,) whether planetary, celestial, or supercelestial worlds. Be they what, or how many they will, supposing they are visible, that is, actually seen by some particular souls or other, they are all understood and comprehended within the notion of the visible world: for my subject leads me to affirm, that a visible world, as visible, is not external. Some perhaps will be apt to prevent my inquiry, by urging that it is not capable of being a question, whether the visible world be external or not; it being self-evident, that a visible object, as visible or seen, is and must be external; that an object's being seen as external, is a simple and direct proof of its being really external; and consequently that there is no foundation for the distinction between the *quasi* and real externeity of a visible object, which I laid down in my introduction.

I answer, then indeed I am blown up at once, if there be any truth or consequence in the objection. But the best of it is, that I had never any design to palm this distinction upon my reader gratis, foreseeing it might stick with him. Nevertheless,

he must allow me the common benefit of words, whereby to explain my meaning; and this was all the liberty I presumed upon, in premising that distinction. Whether the seeming externeity of a visible object, be indeed an argument of its real externeity, I leave to be proved by all those who will affirm it. However, it cannot be denied, but that it is capable of being a question. For though the truth, (or fact) be against me, yet visible objects seem to be external; and herein we all agree; so that one member of the distinction is allowed by all to be good. If so, what should hinder it from being a fair question, whether this *seeming* be an argument of its real externeity? For my own part, I am far from taking it for granted, that this distinction is good, or built upon real facts, (though every one must allow the distinction to be good in general between real and apparent,) for this would be to take a main part of the last question for granted. But then, on the other hand, it cannot be expected that I should admit an adversary to take it for granted, that this distinction (with regard to visible objects) is not good; in other words, that there is no difference in the thing, between *seeming* and *real externeity*, or between visible and external. For this would be to grant away at once the whole matter I am concerned for. If therefore another would have me grant or allow this, let him fairly set himself to shew, wherein lies the connection between these two different terms, or prove what is affirmed in the objection, namely, that a visible object, as visible or seen, is and must be external. Here, the least thing to be expected is, that he point or single out one visible object, which is allowed, or may be plainly proved to be external. In the mean time, or till something of this kind be attempted by another, all must allow

me the liberty of doubting, whether there be any such connection or not; at least bear with me, whilst I am content to prove that there is no such connection.

Let this then be the first step by which I rise to my last conclusion; namely, to shew, that the seeming externeity of a visible object, is no argument of its real externeity. Or, in other words, that a visible object may exist in, or dependantly on, the mind of him that seeth it, notwithstanding that it is seen, and is allowed to seem to be external to, or independant on it.

SECT. I.

That the seeming externeity of a visible object, is no argument of its real externeity.

TO show this, I think the best way will be by instances, or an induction of particular objects, which, though they seem as much to be external, as any objects whatsoever, yet are, or must needs be granted, to be not external. These, to speak as orderly as I can, shall be divided into two sorts, *possibles* and *actuals*.

By *actuals* are meant certain instances of perception, which are ordinary and usual, or which, at least, have been in fact. And by *possibles* are meant certain instances of perception, which have never indeed been fact, but which need nothing but an increase of power, to make tham so at any time. And,

First, for the last of these, viz. of possible instances of perception; where the object perceived is allowed to be not external, though it appears to be as much so as any objects whatsoever. Of this

sort I shall mention two, and that according to their degrees of actuality. And,

First, for that which is the least actual of the two, which shall be an instance of a man's perceiving a creature, which has not so much as in its kind, existed externally; (supposing here for the present that some things have so existed;) I mean, one of those they usually call chimæra's. Of these there are distinctions and names, of which one is *centaur*.

A centaur, is an *ens* or *being*, partly horse, and partly man: a mere fiction of poets or painters; that is, a creature which has never existed, or been seen, any otherwise than in imagination. But in imagination it has, or is supposed to have been seen, and as such it has existed, and does or may continually exist.

Well now, let some particular person be supposed, in whose mind or imagination, a centaur does, this instant exist; and let his name be called Apelles. Apelles then perceives a centaur, and that vividly or distinctly enough to draw the picture of it, or describe its shape and proportions with his pencil.

These things supposed, I demand how does this centaur seem to Apelles? Either as within or without him, whilst he fixes the eye of his mind upon it, so as to describe it? For an answer to this question, I appeal to every person living, whether an object of imagination does not seem or appear to be as much external to the mind, which sees it, as any object whatsoever; that is as any of those which are called objects of vision. If so, I might here observe, that we have already one instance of an object perceived, which, as perceived, is seen as without, yet is indeed not so, but altogether existent in, or dependant on, the mind that perceives it. But I am content to suppose that it will be urged to

me, that this is not an instance to the intended purpose, which was not concerning imagination, but sense, and particularly that of vision. Well, I submit to the charge of fact, lest I should seem too rigorous, and so overstrain my point: but then my reader will agree with me in the conclusion I contend for, if from this very instance I shew him a like possible case of vision, wherein the object perceived is not external.

In speaking of *possibles*, allowed to be such, I have all power at my command, or the liberty of supposing the power of God himself to produce effects for me. Suppose then an almighty power ready at hand to produce this imagined centaur into an object of vision; what is to be done in this case, or to this end? Must an external centaur be created that Apelles may see it? Perhaps so, but is there no easier or shorter way than this for Apelles to see a centaur? Nay, but he is supposed already to see a centaur, only that we do not use to call it seeing, but imagining, because of the faint and languid manner after which he seeth it. But if this be all the difference between what we use to call seeing and imagining, they may easily coincide, without any considerable difference in the object perceived, or in any thing else with which we are at present concerned. For what is that which is perceived or seen, when an object visible is before our eyes? Why nothing that I can think of but figure and colour? Well, Apelles imagines or perceives a centaur; he perceives then a certain figure which we call a centaur; he perceives it indeed in a certain languid manner, or not so vividly as some objects are perceived, which greater vividness we use to call colour, but still he is supposed to perceive a centaur. If so, add colour to this perception, and the centaur which was before only imagined, is now become a seen or visible object,

and yet still, as being the same figure or extension, is as much in his mind, or as little external, as it was before.

Perhaps my reader will not be content to grant me, that the difference between imagination and vision is only that of more and less, or, that an object in one is perceived *with* or with *such a degree* of colour, and in the other, either with figure only, or with a much less degree of colour. Perhaps so; but he will doubtless grant this, that whilst Apelles imagines a centaur, God may so act upon his mind, as that by degrees he shall perceive it more and more distinctly or vividly, till he comes to perceive it to the full as vividly as any object is or can be perceived or seen. If so, I leave it with them to distinguish imagination from vision any otherwise than I have done, who allow not my manner of doing it; and in the mean time must demand of them one mark or sign whereby to distinguish the centaur thus vividly perceived, or supposed to be perceived, from an object which they would call truly *visible*, or *seen*.

The other instance which I promised to give is indeed much like the former, only that the object perceived, (or one like it,) is here supposed to exist amongst the ordinary objects of the visible world; and it is this.

When a man with his eyes shut, or at noon-day, has a mind to think on the moon at full, it is certain he may think on it. This moon, as being truly perceived, truly exists: it exists also in the mind of him that seeth it, and that so really and entirely, that, though every external object were supposed to be annihilated, or not one besides myself had ever been created, yet still I might see or imagine a moon.

Well now, suppose as before, that whilst I thus imagine a moon, God should so act upon my mind

by insensible degrees, or otherwise, as to make this imagined moon appear brighter and brighter to me, till it comes to be to the full as vivid as the moon supposed to be in the heavens, or as any moon whatsoever. In this case, I say, we have an instance of a visible or seen object, which, to appearance, is as much external as any object whatsoever, but is not indeed external: which therefore is a demonstration that the visible externeity of an object is no argument for any real externeity of it.

II. And now from *possible* I come to *actual* cases, or instances of the same thing. And here,

1. The first shall be of certain other sensations, or modes of sensible perception, wherein the objects perceived exist only in the mind, though they seem to exist externally to, or independant on, it; such as sounds, smells, tastes, heat, pain, pleasure, &c.

If any one doubts whether these things be within or without the souls or perceptive faculties of those who sense them, they must excuse me if I am unwilling to digress so far as to undertake the proof of what I here suppose; and that partly on the account of its evidence; but I am content to say chiefly, because the thing has been already done often to my hands, particularly by Mr. Des Cartes, Mr. Malebranch, and Mr. Norris, in several parts of their much celebrated writings, whither I chuse to refer my inquisitive reader.

Supposing then that these objects of sense exist truly and really in their respective faculties, I am sure no one will doubt whether they do not seem to exist altogether without them. For this I appeal to every one's experience, and to the difficulty which so many find in believing, that they do not indeed exist without them. If so, we have then several instances together of certain objects of sense, which, notwithstanding that they seem as

much external as any objects whatsoever, yet really and truly are not external.

"Moreover, there is of this sort a particular instance often mentioned by philosophers, which is very home to this purpose; and that is, of a man's feeling pain in a member which he has lost. This is usually said to depend on certain motions made by certain humours or animal spirits on the nerves or fibres of the remaining part; but of this I make no other use or account at present, than only to collect from hence, that the effect would still be the same though the absent member were as well annihilated as lost. If so, I ask, where is this member which the man is sensible of? Where, I say, is, or can it be, but in the mind or soul of him that feels it?"

2. The next instance shall be of light and colours, which are allowed to be objects properly visible. These appear or seem as much at a distance or external as any objects whatsoever, yet scarce any thing is more evident than that they are not so.

In this I speak more particularly to Cartesians; and on this occasion I desire to ask them, how has it come to pass, that they, who all agree that light and colours are not external, should yet happen to overlook the same conclusion, with relation to the bodies, subjects, or extensions, which sustain these accidents? For can any thing be more true or proper than to say, such a body is luminous, or, of this or that colour? Or more evident than that light and colour exist in, or are accidents of matter? And shall we say that the subjects exist without, and the accidents within the soul? Even those very accidents whose *totum esse* is *inesse* in their particular or respective subjects? But to return: as for those who are not yet content so much as to grant that light and colours exist in the soul, I must

refer them, as before, for their satisfaction in this point. In the mean time this will doubtless be admitted by all sides or parties, that if light and colours are not external, I have given them an instance of some visible objects, which are very apparently, but yet are not really external, which is all the labour I shall be at in this particular.

3. My next instance shall be of those who on some occasions see many objects which no other persons see, and which are unanimously granted to have no existence, but in the minds or faculties of those who see them. Such are those who see men walking the streets with halters about their necks, or with knives sticking in their bodies. Such are those who see themselves or others in the figures of cocks, bulls, or wolves, or with the equipage of sovereign princes. And such, lastly, are those who see and converse with several persons, see houses, trees, &c. which no other person seeth, or perhaps hath ever seen.

These, you will say, are mad or light-headed. Be it so, that they are mad, or drunk, or whatsoever else you will, yet, unless we will be like them we must needs grant the fact, viz. that they really see the things or objects they pretend to see. They see them also as external or without them; and yet we all grant, and even contend, that they are not without them, which is as much as I am here concerned for.

4. Another instance of vision, which infers the same conclusion, is of persons whose minds or perceptive faculties are acted in an extraordinary manner by the spirit of God: such was Ezekiel, such was St. John, the author, to us, of the Apocalypse, and such have been many others: these were neither mad nor light-headed, and yet they tell us of strange things which they have seen as evidently, and as externally to appearance, as any objects

whatsoever; but yet such things as never really existed without the minds, or perceptive faculties of those who are supposed to have seen them.

5. Another instance of vision which infers the same conclusion, shall be one of which every person may have the experience. Let a man, whilst he looks upon any object, as suppose the moon, press or distort one of his eyes with his finger; this done, he will perceive or see two moons, at some distance from each other; one, as it were, proceeding or sliding off from the other.

Now both these moons are equally external, or seen by us as external; and yet *one* at least of these is not external, there being but *one* moon supposed to be in the heavens, or *without* us. Therefore an object is *seen* by us as external, which is *not indeed* external, which is again the thing to be shewn.

6. The last instance which I shall mention to this purpose, shall be one likewise of which we have every day's experience, but yet is little observed; and that is, the usual act of seeing objects in a looking-glass.

Here I see sun, moon, and stars, even a whole expanded world, as distinctly, as externally, as any material objects are capable of being seen.

Now the question (if it can be any question) is, Where are these things? Do they exist *within* or *without* my soul, or perceptive faculty? If it is said that they exist without, I must still ask where? Are they numerically the same with that sun, &c. which I see without a glass, and are here, for a time, supposed to be external? This cannot be, for several reasons: as first, I see them both together; that is, I as evidently see two distinct objects (suppose suns) as ever I saw two houses, trees, &c. that is, I have the same simple evidence of sense for their

being two distinct suns, as I have, or can have, that one object is not two, or two one, or that one is not ten thousand. Secondly, I can, and have often seen one of these suns, viz. either of them singly, without seeing the other. Again, thirdly, instead of two, I have sometimes seen at least twenty or thirty suns, all equally seen, equally seen as external. Moreover, fourthly, we often see the object in the glass very different from that which is like it, and goes by the same name, *without* the glass. As for instance, one shall be in motion, whilst the other is at rest; one shall be of one colour, nay also, figure and magnitude, and the other shall be of another; to which may be added, many other particular differences of which every one's experience will prove a sufficient testimony.

If then an object seen as in a glass, be not the same with any seen *without* a glass; and if it be still affirmed that it exists *without* the soul which perceives it, I still proceed to demand, *Where* does it exist? Shall we say that it exists in the glass? Perhaps so, but this must be made at least intelligible, before another can assent to it. What, a whole expanded world in a piece of glass? Well, let those who think so enjoy their own opinion. For my part, I freely own I am not a match for such reasoners; and so I grant, as to a superior genius, whatsoever they shall be pleased to require of me. As likewise to those who shall seriously contend, that the objects seen as in the glass, are not indeed in the glass, but in the eye of him that seeth them; not thinking it possible to urge any thing to the contrary, which will be of the least weight or moment to alter their opinion.

Nevertheless, I expect to find some, either of the learned or unlearned part of the world, who, upon the first suggestion, will very readily agree with me, that the objects seen as in the glass, are not external

to the mind which sees them; and indeed this is to me so simply evident, that I cannot induce my mind to set formally about the proof of it, and do almost repent me that I have said so much already on this head, or that I did not at once lay it down as a thing universally taken for granted, at least which would be granted upon the first suggestion. However, till such time as I am apprized of an adversary, I will now conclude that the objects seen as in a glass, are not external to the soul, or visive faculty of him that seeth them; and consequently, that I have here again given an instance of a visible object, as much external to appearance, as any object whatsoever, but which is not indeed external.

Now from all and every of these instances it follows, that the visible or apparent externeity of an object, is no argument of its real externeity; and consequently (if it be not the same thing again in other words) that there is a true and real difference between the *quasi* and any real externeity of an object; which justifies the distinction laid down in my introduction.

This conclusion follows, with the same force or evidence, from the *possible* as from the *actual* instances; and as much from one of either sort, as from ten thousand. For if but one, and that a possible instance, be given and allowed of, wherein an object may be seen, with all the visible marks of being external, which attend any visible or seen object whatsoever, but which yet is not indeed external; this one intirely destroys all connection between apparent and real externeity; and so the consequence will be, that an object's appearing to be external, is no manner of argument that it is really so.

Yet I have instanced in many things, for my reader's sake, as well as my own. For my own indeed, in the first place, in as much as by this means

I have many strings to my bow, which must every one be broken before the bow itself can be bent the other way. But yet not forgetting my reader's benefit, (if he will allow it to be any) inasmuch as, amongst so many instances, he may meet with one at least which will hit in with his way of reasoning, and so dispose him to read what follows with the more pleasure.

SECT. II.

That a visible object, as such, is not external.

HAVING shewn that there is no consequence from the visible or *quasi* externeity of an object to any real externeity of it, I come in the next place to shew, that a visible world *is* not, *cannot* be external.

But before I enter upon this task, what should hinder me from asserting my privilege of standing still in this place, and demanding to have some other argument produced for the externeity of the visible world, besides that of its seeming externeity? This is that which convinces people of every age, and sex, and degree, that the objects they behold are really external; and this I am sure, with far the greater part, is the only reason which induces this persuasion. With such, and even with all, till some other argument be produced, I may be allowed to argue, as if this were the only argument: that is, to conclude outright, that no visible object is indeed external. For to remove all the pillars on which a building stands, is usually thought to be as effectual a way to demolish it, as any direct force or violence.

But not to insist on every point of property, when so large a field is before me, I will here im-

mediately enter upon the work of proving it to my reader, according to my promise. And here,

1. First of all, let him try once more the experiment already mentioned, of pressing or distorting his eye with his finger. In this case I observed before, (with an appeal for the truth of it to common experience,) that two like objects appear, or are seen. Hence I concluded, that only one of these can be external; that is, that one of them is not so. But here I argue from the same fact, that neither of them is external.

Let an instance be put, as suppose the object which we call the moon, by pressing my eye I see two moons, equally vivid, equally external; if so, they are both external, or neither. But we are agreed already that they are not both so, therefore neither of them is external.

If any one will affirm, that only one of these moons is external, I must desire him to give me one mark or sign of the externeity of one, which is not in the other. In the mean time let him try this experiment with himself.

In the act of seeing two moons, let him call one of them the true external moon, and the other only an appearing or false, or by any other name which he shall please to give it: this done, let him (with his eyes or mind still intent upon these objects) remove his finger, and press the other eye in like manner; or shut either one of his eyes, still keeping the other intent on the same object, and he will find by manifest experience, that the moon, which he calls the true, will prove to be the false, and that which he calls the false, will prove to be the true. This, I think, is plain and palpable demonstration, that they are both equally true, or (as we here understand the word) both equally external. Since therefore no more than one can be pretended to be external, to say that they are both equally so, is

the same as to say that they are neither of them so.

Note 1. That the same argument here proceeding on the instance of the moon, is the very same with relation to any other visible object. So that the conclusion comprehends the whole visible world at once; or, in other words, every visible object, considered as visible or seen.

Note 2. The same conclusion likewise follows from every one of the instances mentioned in the former section. Since, as on one hand it appears that there is no consequence from the apparent to any real externeity of an object; so in the very act of supposing certain objects, which are as much apparently external as any objects whatsoever, but which indeed are not external, we must of course suppose them to be as much indeed external as any objects whatsoever. Since therefore some are not external, we must conclude that none are so. And this conclusion will and must hold good till some mark or sign be given of the externeity of one object, which is not also in the other; the very attempt of which is contrary to the supposition. But to proceed.

II. It is a maxim in philosophy that *like* is not the *same*, and therefore much more one would think should it be allowed that things vastly different are not the same. As for instance, that light is not darkness, nor darkness light; that greater is not less, nor less greater, &c. And yet on such plain and simple principles as these it follows that the visible world is not external.

Here then let us again single out an object which will answer for the whole visible world, and let it be the same as before, viz. the moon. The question is, Whether the moon which I see is external or not? In this question there is not a word but what is plain and simple, or which has been explained

already: let us then proceed to the trial of it by the plain rule before-mentioned, viz. that things different are not the same, which indeed is the same thing in other words with the first principle of science, viz. *Impossibile est idem esse & non esse.*

1. First then I am content for a while to grant that there is an external world, and in this world an external moon in a place far distant from us, which we call the heavens. Still the question returns, whether the moon which I see be that external moon here supposed to be in the heavens? Well now, the moon which I see is a luminous or bright object. But is the moon supposed to be in the heavens a luminous thing or body? No; but a dark or opacious body, if there is any truth in the unanimous assent of all philosophers. Again, the moon which I see is a plain surface; but is the moon in the heavens a plain surface? No; all the world agree that the moon in the heavens is rotund or spherical. Again, the moon which I see is semicircular or cornuted; but is this the figure of the moon supposed to be in the heavens? No; we all affirm that the moon in the heavens is round or circular. Again, lastly, the moon which I see is a little figure of light, no bigger than a trencher, nay so little, as to be intirely coverable by a shilling. But is this a just description of the moon supposed to be in the heavens? No; the moon in the heavens is by all allowed to be a body of a prodigious size, of some thousands of miles in its diameter. Well then, what follows from all this, but that the moon in the heavens is not the moon which I see; or, that the moon which I see is not in the heavens, or external to my perceptive or visive faculty?

2. Secondly, As we have seen that the moon which I see, is not the same with any moon supposed to be in the heavens, and consequently, that the moon which I see is not external, by a compari-

son of the visible or seen moon, with that which is supposed to be external; so, the same thing will appear by a comparison of visible things with visible, or, of the same thing, (as I must here speak, for want of more proper words,) with itself. But to explain.

At this instant I see a little strip of light, which common use has taught me to call the moon. Now again I see a larger, which is still called by the same name. At this instant I see a semicircle; a while after I see a circle of light, and both these are called the moon. Again, now I see a circle of light of such or such a magnitude; a while after I see a circle of light of a much greater magnitude; and both these, as before, I am taught to call the moon. But really and truly, instead of one, I see many moons, unless things different are the same. How then can I believe that the moons which I see are either one or all of them external? That they are all so cannot be pretended, for no one ever dreamt of more than one external moon; and I am as confident on the other hand, that no one will pretend that either one of them is external, as in exclusion of the rest. I conclude then that they are all alike external, that is, that neither of them is so; and consequently, (there being nothing in this but what is equally true of every other object of the visible world,) that no visible object is, or can be, external.

III. But why such long fetches to prove a simple truth? It is no wonder that my reader (who perhaps has never thought of this subject before) should overlook the exact point of the question, when I myself can scarce keep it in view. I would beg leave therefore to remind myself and him, that the question in hand does not any way proceed upon, or so much as need the mention of any bodies supposed to be external, and unknown to

us; but the question is, whether the extensions, figures, bodies, (or whatever else you will call them) which I see *quasi* without me, be indeed without me or not.

But can the resolution of any case be more plain and simple than of this? For is there any other possible way of *seeing* a thing than by having such or such a thing *present* to our minds? And can an object be *present* to the mind, or visive faculty, which is affirmed to be *external* to it? Then may we think, without thinking on any thing; or perceive, without having any thing in our mind. If then the *presentialness* of the object be *necessary* to the act of vision, the object perceived cannot possibly be *external* to, at a *distance* from, or *independent* on, us: And consequently, the only sense in which an object can be said to exist without us, is its being not seen or perceived. But the objects we speak of are supposed to be seen, and therefore are not external to us, which is the point to be demonstrated.

[To this I might add another, which (if possible) is a yet more simple manner of proceeding to the same conclusion. And it is this. The objects we speak about are supposed to be visible; and that they are visible or seen, is supposed to be all that we know of them, or their existence. If so, they exist as visible, or in other words, their visibility is their existence. This therefore destroys all, or any distinction between their *being*, and their being *seen*, by making them both the same thing; and this evidently at the same time destroys the externeity of them. But this argument has the misfortune of being too simple and evident, for the generality of readers, who are apt to fancy that light itself is not seen, but by the help of darkness; and so, without insisting any farther on this head, I proceed to some other points which may *seem* to be more intelligible.]

IV. Surely, could the most extravagant imagination of man have conceived a way, how an object supposed to be external, could ever possibly become visible, philosophers would never have been at so great an expence of fruitless meditation, as to forge the strange doctrine of the active and passive intellect, impressed and expressed species, &c. whereby to account for our manner of seeing objects. This doctrine, as I remember, is as followeth.

It is supposed, that when a man stands opposite to an object, there are certain scales or images, (which proceed from this object representing it) which fly in at the eye, where they meet with a certain *being, faculty,* or *power,* called the *active intellect,* which, in an instant, spiritualizes them into ideas, and thence delivers them to the inmost recess of the soul, called the *passive intellect,* which perceives or sees them.

Now far be it from me to move the least objection against this account of vision. They are doubtless all plain and simple ideas, or else Aristotle had not chosen, neither had the tribe of philosophers since patronized them.

I only observe first, that this antient, and almost universal account of vision, supposes that the object *seen* is this supposed *scale* or *effluvium.* And consequently, secondly, that in order to the *act* of vision, there is, and must be, an intimate union between *faculty* and *object.*

For if the soul can see an object which is not present with it, there had been no need of images of the object to become present to the soul, by passing through the eye, &c. However, they need not be images, but any other fashioned particles would have done as well, if the objects seen were not those very images thus spiritualized in the active, and thence passing on to the passive, intellect.

Why then should not I conclude, even with uni-

versal consent, that the objects seen are not external, but intimately present with, or existent in, the soul?

Those who patronize this hypothesis of vision, will, doubtless, tell me, that it is the least of their thoughts thereby to affirm and conclude, that the visible world is not external. On the contrary, that the hypothesis itself supposes an external world, or outward objects, from whence these images or effluviums proceed.

I answer, it does so; but it does not say or suppose, that these external objects are visible or seen, but only that they are or exist eternally. On the contrary, the objects seen are supposed to be these images, which, in order to be seen, must first cease to be external; that is, must pass into the soul, and become ideally present with it. So that this account of vision supposes the visible world, as such, to be not external.

If, together with this, men will yet hold or affirm that the *visible* world is external, I can only shew them that their own account supposes the direct *contrary*. But it is neither in mine, nor any other person's power, to hinder another from holding contradictions.

V. From the *old* I proceed to the hypothesis of vision, which is a part of the *new* philosophy. Every one, I suppose, has heard of the doctrine of *seeing* the *divine ideas*, or (as Mr. Malebranche expresses it) seeing *all* things *in* God. By this every mode of pure or intellective perception is accounted for; but I am here concerned only with *that* which is distinguished by the name of *vision*. With regard to this the hypothesis is as followeth.

In every act of vision they distinguish two things, viz. *sensation* and *idea*, in other words *colour* and *figure*. Colour, they say, is nothing different from the soul which seeth it, it being only a modification of thought or mind. And as for figure, viz. this or

that particular figure which is seen, they call it part of that intelligible extension which God includes, or contemplates, thus and thus exhibited to our minds.

Now I say, nothing is more evident than that this account of vision supposes *external matter* is not *visible;* and consequently, that *visible matter is not external.* So evident, that I depend even on my Aristotelian reader, (who neither approves, nor so much understands, what these new philosophers mean,) that he will perceive at first sight that this must needs be meant by it.

However, when I am apprized of any one who doubts of it, I shall not only be ready to argue this matter fairly with him, but will also undertake to produce several express passages from the writers of this sort, which directly affirm and contend, that external matter is not, cannot, become visible.

Nevertheless, I am sensible of the opposition which may be made to this assertion, from several other passages taken from the same writers. But I cannot help it if men will speak inconsistently with themselves; or explain their meaning so by halves, as that the same thing shall appear to be both affirmed and denied by them.

But the truth is, I fear but little opposition as to this point: since no one will have zeal enough to undertake it, but those who professedly patronize this new philosophy: and I have so good an opinion of these, as to believe that they will rather take the hint, and agree with me, upon due reflection, than set themselves to oppose, from any partial regard to their own preconceived opinions.

VI. I shall therefore once more endeavour to persuade my Aristotelian reader, that it is according to the principles of his own philosophy to assert, that visible matter is not external.

For this I would refer him to what he will find in the first book of philosophy, he shall happen to light

on, which has any thing on the general subject of matter. For instance, let him consult Suarez, Scheibler, or Baronius, on this subject, which will be found in their books of metaphysicks; which authors I mention more particularly, because with these I myself have been most acquainted; not but that I dare appeal to the first philosopher on this subject which my reader shall happen to lay his hands on: But to the point.

I do not here affirm, that any one philosopher of this sort has ever once asserted, that visible matter is not external, or so much as ever moved the question, whether it be so or not: on the contrary, I verily believe, that if the question had been put to every individual of them, they would unanimously have affirmed that it is certainly external. Nevertheless I still appeal to my impartial reader, whether the questions which they move, and the resolutions which they agree in, concerning the thing which they call *matter*, do not plainly suppose that they are speaking of an object which they do not see, and which is utterly invisible.

As for instance, it is usual for them to enquire whether *matter exists* or not. Whether it has an *actus entitativus*; or whether it be only *pura potentia*. How it is capable of being *known*, &c.

As to the first of these questions they use to resolve it thus. That matter must needs exist, because it is supposed to be created, and also because it is supposed to be part of a *compositum*. And here again they will tell you, that if it were altogether nothing, it could do nothing in nature; it could not be the subject of generation and corruption; it could not be true, that all things in their corruption are reduced to matter; and besides, if matter was nothing, there would be a continual creation and annihilation, which is absurd, &c.

As to the *second* question, viz. whether it be *pura*

potentia, or not, they distinguish of a twofold *actus*; *actus physicus*, and *actus metaphysicus*. *Secundum actum physicum*, they say, matter is allowed to be *pura potentia*, but not *secundum actum metaphysicum*, &c.

And then lastly, as to the other question, viz. *quomodo materia possit cognosci*, they resolve it thus, That God and angels are supposed to know it *per propriam speciem*; but we are supposed to know it only by consequence, or, as they say, *per proportionem seu analogiam ad materiam rerum artificialium*, &c. whence Plato is quoted by them, as saying, that matter is knowable only *adulterina cognitione*.

Now I say, for what are all these, and several other such like fetches which I could name, if the matter they inquire about be that which is visible or seen? Can it be doubted whether that exists or not which is supposed to be seen? Whether such an object as this be *actus entitativus*, or *pura potentia*? And whether we *know* any thing of the existence of an object which we are supposed to see?

If visible matter were the matter they are debating about, can it possibly be accounted for, that not the least mention is ever made of our seeing it? Or, that for its existence, &c. they should never think of referring us to our senses? And yet I defy another to shew me but one word of this sort in any philosophic disputation on this subject.

Nay, they plainly tell us, that the matter they speak about is not by us seen, but is directly knowable only by God and angels.

If then the inquiry they make about matter be not about any matter supposed to be seen by us, yet nothing is more evident, than that the matter they speak about is supposed to be external. So that what should hinder us from concluding, that it is the unanimous opinion of these philosophers,

(though indeed they have never in express words affirmed it,) that *external matter* is, at least to us, invisible; and consequently, that *visible* or *seen* matter is not *external*; which is all that I am here concerned for, leaving others to explain for them what they mean when they affirm, that external matter is visible to God and angels.

CHAP. II.

Objections answered.

HAVING proved my point after my own manner, it may be expected that I now attend to what another may offer on the contrary part. This, I confess, is a piece of justice which I owe a fair adversary, and accordingly I here profess I will be ready at any time, either to answer his objections, or submit to the force of them. Bnt how can it be expected that I myself should oppose any thing to the point I have been contending for? For my reader may remember, that I have already declared, that I know of no one reason or argument, either in myself formerly, or from others, for the externeity of the visible world, besides its *seeming* externeity. But if I have not already shewn the inconsequence of this argument, I confess I have been very idly employed; and if I have, I have at once answered every objection that can reasonably be expected from me, to be urged against the point I am concerned for.

There may be cavils indeed enough, and of these I expect my share from a certain quarter; for having endeavoured, with a serious air, to demonstrate a proposition which is so contrary to common prejudice, and which some perhaps will be resolved not to admit; nay, I myself am not so abstracted from

my former self, as not to be able very easily to invent a set of arguments of this sort. But what can in reason be expected that I should do with an adversary of this sort? Shall I study a means to convert those whom confessedly it is not in my power to convince? But I have said already that I know of no mechanical engine proper to remove prejudices; and I must still profess the same, till this awakened age shall bless the world with the discovery. Shall I then altogether pretermit the mention of such objections, affecting to despise them, as not worth the labour of answering them? This indeed I would do if I wrote on the side of a prevailing party; but a whole world against one is too considerable an adversary to be despised, though they were not only in the wrong, but were little better than ideots. But I have reason to expect, that not only such, but even the wise and learned, at least by far the greater part, will be my adversaries in this point, after all the endeavour which I have used to justify it; and therefore, till I am apprised of some other, I must suppose them to be so, in virtue of such objections as I can think of at present, or have by accident heard from others in conversation, which are these that follow.

Objection 1.

First, I expect to be told, that in arguing against the extra-existence of the visible world, I oppose a known evidence of truth, viz. the universal consent of mankind, that it is external.

Answer.

This now is one of the things which I just now called cavils, which I think is the best name that an argument deserves, which is nothing at all to the purpose in that wherein it is true; at least such a

one as is false, both in principle and consequence, which will, I suppose, appear to be the case of the present objection. For,

First, as to the fact or minor part of the argument, what should hinder me from denying it? For, first, who can assure me that since the world began, not one or two, or two hundred persons, have not been of that opinion which I am here concerned for? How many may have written on this subject in former times, and we not hear of it in the present? And how many more may have lived and died of this opinion, and yet have never written on it? But, secondly, what if we allow that not one has ever written on this subject before? This will but turn to the disadvantage of the objection. For where then is the universal consent before spoken of? Do we mean the same by it as universal silence? Silence in this case will amount to but a very slender argument of consent; and indeed so slender, that the bare opinion or affirmation of any one person to the contrary, who has professedly considered and inquired about the matter, will outweigh a silence ever so universal, and may even justly challenge the evidence of consent, be it more or less, on his side of the question.

If therefore the question about the externeity of the visible world, has never, before this time, been professedly considered, I may fairly plead universal consent for that part which I defend; since the consent of all that have ever considered it, must needs be all that is meant by universal consent. If therefore there be found on the contrary part, any thing in mankind which is like consent, it must lose its name, and be called prejudice or inclination; which is an adversary (as I have observed before) I have no arms to contend with. But lastly, methinks it should weigh something towards consent on my side, that

I have shewn already that it is consistent with, and even necessary to the principles of philosophers of all sides, to hold that which I contend for. And if this be true, the utmost that can be said in answer to it will be this only, that they have contradicted themselves, which I am as ready to admit of, as any one can be to urge, since this will make the authority of ten thousand of no value against the point I am concerned for. But,

Secondly, What if it were true, or admitted, that universal consent lay opposite to my conclusion? Must it therefore be condemned without trial, or hearing of any thing in its defence? If not, then it is allowed to be possible, that a proposition may be true, though it happen to cross the consent of all mankind. And if so, how can the contrary be true too, namely, that a proposition is therefore false, because contrary to consent? But now, if a proposition may be true, which is against universal consent, I immediately affirm that this is the case of the proposition I am contending for. Well, and how shall this be tried? How, I say, but by reason and disputation? So that unless universal consent be held to be an argument universally conclusive, it concludes nothing at all, (there being a contradictory distance between these two propositions, viz. *a thing may be true which is contrary to consent*, and *a thing may not be true which is contrary to consent.)* And therefore the mention of consent is here altogether needless, at least, its introduction serves only to convince us, that it is much better it had not been introduced. But

Some perhaps will hold this argument to be universally conclusive, viz. *A proposition may not be true which is contrary to universal consent;* and this, I suppose, must be the meaning of those who will pretend to mean any thing by the words of the objection. But is there a man upon earth who will

join issue with me on this foot? Perhaps so, but he must excuse me if I declare beforehand that I will not do so with him whilst he continues to be of this opinion. And I am fool enough to say this, because I think I have reason for it. But this alone unqualifies me to hold discourse with one who will contend, that universal consent is a simple evidence of truth. Whereas if this be true, then universal consent is truth, and reason, or the common standard of every particular truth. Consequently, by this rule, a proposition may become true which is simply false, or false which is simply true; that is, all that which I have been used to call truth and reason is destroyed at once. But now, whatsoever proposition I defend or deny, I must take it for granted that there is such a thing as truth, independent and immutable, and that reason is reason, though ever so many people dissent from me, or deny it; that is, I must take the question between us for granted, as my first step towards the disputation of it. And therefore, as on one hand I can do no otherwise than thus; and on the other I am sure no adversary will allow me to take this method with him, we must even part fairly, as being unqualified for each other's conversation. And this is my best answer to the first objection.

Objection 2.

Does not the sense of feeling assure us of the extra-existence of the visible world? To this I

Answer.

First. If for instructions sake only you propose this question, you are doubtless disposed to take my word for an answer; accordingly I answer, No; the sense of feeling does not assure us of the extra-existence of the visible world. If this does not satisfy, you are desired, instead of questions, to give

me an argument, whereby it may appear that the sense of feeling does assure us of the extra-existence of the visible world. What makes this the more necessary is, because I have proved already in great variety that the visible world is not external; and amongst the rest, that the sense of vision gives us evident assurance, that a visible object, as such, is not, cannot be, external. And methinks, if this is not false, it should be true; or if false, yet should not be so called, till either the arguments are answered by which it is defended, or some other argument be produced, which concludes against the truth of it: for till one of these things be done I have but the objector's bare assertion against me, whereas he has mine, and I think something else on the other side. But,

Secondly, I am content to go on with the labouring oar in my hand, and shew the contrary to that which is affirmed in the objection. Accordingly I affirm,

First, That be the object of the sense of feeling what it will, or leaving the decision of this matter at large, feeling is no argument of the extra-existence of this object. For the truth of this I will only refer my reader back to what has been already observed on this subject; or rather I presume that he remembers both *that*, and *how* I have prevented the force of this part of the objection; so that till I hear farther on this point I may save myself the pains of adding any thing in this place. But I affirm also,

Secondly, That the sense of feeling is so far from assuring us of the extra-existence of the visible world, that it does not so much as say any thing of its *existence simple*. I say not here with a certain Author *, that *we cannot feel existence*, it being the same thing to do so as to *feel a proposition*. This may be a good argument for aught I know, but I

* Mr. Norris's Theory of the Ideal World. Vol. 1. p. 198. § 13.

profess it is too high or too low for me, for I do not understand it. But what I affirm is this, that whatever be the object of the sense of feeling, and even admitting that it assures us of the existence of its proper object; things visible are not the object of this sense; and consequently we can have no assurance this way of so much as the *existence simple* of such objects. I know not how it may sound to another, but to me to say, I can *feel* a visible object, is just such another piece of sense as to say, I can *see* the sound of a trumpet, or *hear* the colours of a rainbow. One would think it should be granted me that a visible object is *visible*, and that a tangible object is *tangible*, and that seeing and feeling are two different things or sensations; but it is the same thing to me though they were one and the same; for if so, then as vision is feeling, so feeling is vision; and then I have proved already that a visible object, as such, is not external, whereas if they are different they must have different objects, be the names of them what they will; and then a visible object will be one thing, and a tangible object another: and therefore how the existence of a tangible object should become an argument for the existence (much more the extra-existence) of a visible object, is indeed past my skill to understand, any farther than this, that if I understand any thing at all, I understand, and I think have shewn, this to be a plain and glaring contradiction. And so I proceed to

Objection 3.

Which is Mr. Des Cartes's; and that according to the best of my remembrance is this: he concludes the being of an external world from the truth and goodness of God, who is not to be supposed to deceive us in our involuntary judgments or inclinati-

ons. [This, I say, I take to be his meaning, though my manner of expressing it be very different from that of his two great followers, Mr. Malebranche* and Mr. Norris†, for which I refer my reader to the places cited at the bottom. Whether I have done him justice, or not, I leave to be disputed by those who think I have not. In the mean time, the reason which I give for differing from these great persons is, because as they have represented his argument, it seems to be inconsistent with itself, and has not so much as the appearance of being an objection; whereas, as I have here given it, it seems to have some appearance, though how far it is from being a real argument against any thing I am concerned for, will appear by this that followeth.]

Answer.

1. If by the being of an external world, be meant the being of a world, which, as external, is supposed to be invisible, this is nothing to my present purpose, but belongs wholly to my Second Part; wherein I shall attempt to shew that an external world is simply an impossibility, which external world will be also there supposed to be invisible. But if by the being of an external world be meant the same as the *external being*, or (as I have hitherto called it) the extra-existence or externeity of the visible or sensible world, it is then indeed an objection against the point I am now upon. Accordingly,

2. I say, that in my opinion it is no imputation on the truth and goodness of God to affirm, much less to attempt to prove, that the visible world is not external. It is no business of mine to prove this negative, though it be the easiest thing in the

* Search's Illustrations, page 112. † Theory of the Ideal World, Vol. i. p. 208.

world so to do. Let them prove the contrary who build their whole cause of an external world upon the force of it. It is enough for me that I have shewn by many arguments that the visible world is not external. These arguments either conclude, or they do not; if not, let this be made appear by a just and distinct answer to them; but if they do, the point is gained, and they must be persons strangely disposed, who after this will expect I should take their word, when they say, that the truth or goodness of God is concerned, that that should be false, which is, and must be supposed to be true. But to be something more particular I answer,

First, That I deny the supposition of the involuntariness of our judgments for the externeity of the visible world. For this it is enough that I myself am one, who am so far from being involuntarily determined to this assent, that I can, and have already demonstrated that it is not external.

Secondly, We should come to a fine pass of reasoning indeed, if this manner of proceeding were allowed to be good, viz. *I am inclined to judge such or such a thing to be so or so;* ergo, *It is as I would have it, because God will not deceive me.* It is in vain in this case to appeal to reason and argument; nay, though God himself should supply us with reason against our inclination, nay, and give us his word that our inclination is erroneous, yet still we are bound to stand by it, and even plead the authority of God against himself. But, lastly, Do I hear this from a Cartesian, even from Des Cartes himself, who is for nothing more known in the world than for giving us many instances wherein a common inclination may be, and is erroneous; as in judging light to be in the sun, heat in the fire, or in the hand, colours on external objects, &c. In all these cases we are as much *inclined* as in judging the vi-

sible world to be external; and yet it is enough with him and his followers for the confutation of these inclinations, that they have good reason to the contrary: and this methinks should be enough in any case, and with any persons, unless we are resolved to be unreasonable, and even profess ourselves Sceptics, and if so, I confess I am silenced.

PART II.

That there is no external world, and, That an external world is a being utterly impossible.

INTRODUCTION.

HAVING shewn in my former part that the *visible* world is not external, I come now to the other thing proposed in the beginning, namely to demonstrate more at large, or simply, that an external world is a being utterly impossible, or that there is no such world. Now to this, as before, I shall proceed by steps.

CHAP. I.

ARGUMENT I.

AND here I affirm, in the first place, that (abstracting from any argument directly proving this point) we are bound already so far to conclude that there is no external world, as that it is against all the laws of fair reason and argument to suppose or make mention of any such world. For if a

visible world, as such, is not external, an external world, as such, must be utterly invisible, and if invisible, unknowable, unless by revelation.

For, first, an external world (if there be any such thing) is, I suppose, allowed by all to be a creature; but the being of a creature is not to be proved by reason, for reason converses only in things necessary or eternal, whereas a creature, as such, is contingent, and temporary; so that in vain shall we seek to reason to assure us of the existence of an external world.

Then, secondly, it is here supposed that we should seek to as little purpose to the testimony of sense, since an external world, as such, is here supposed to be absolutely invisible. Whether we have any notice from revelation of the being of any such world shall be considered in its proper place. In the mean time I here suppose also, Thirdly, that we have no such notice, so that, as the case stands at present, an external world is a being utterly unknown.

But now I have always received it as a law, that we ought never to reason but upon *known* ideas; and if this be just and reasonable, an external world, as being *unknown*, ought to have as little place in our reasonings as if we knew for certain that there was no such world.

Nay, on the supposition of its being unknown, we are not only bound to omit the mention of it, but also warranted to conclude that there is no such world. This, I say, must be an allowed consequence, till such time as some other pretends the contrary; and he must prove too as well as pretend, else the consequence stands good against him.

Here then is my advantage; we all know and are agreed that there is such a thing as a visible world, and that a visible object, as such, is not external: on the

other hand, we are as much agreed, at least it is here supposed that we are agreed, that we know nothing at all of an external world, supposed, as such, to be invisible: but it is a maxim in science, that *eadem est ratio non entis & non apparentis.* I conclude therefore outright that there is no such world.

It is for this reason that we think it our duty to reason only on the supposition of *body* and *spirit, thinking* and *extended* beings, viz. because we have no knowledge of the existence of any creature, which is neither of these. Hence we think it a very good and safe way of arguing, to make the exclusion of the one, the consequence of the position of the other, and so *vice versâ.* Thus philosophers use to prove that colour, light, heat, sound, &c. belong to, or are affections, of spirits, because they are not included in the idea which we have of *body.* The principle or major proposition of which argument is plainly this. There are but two sorts of beings in the world, viz. *spirit* and *matter;* then the minor is this, viz. light, &c. do not belong to matter, *ergo,* they belong to spirit. Now if this way of arguing is good, it is so by virtue of that principle, that we ought to reason only on known ideas, and that things which appear not, are but equal to things which are not; and it is in virtue of the same that I here plead a right to conclude that there is no such thing as an external world.

I pretend not this to be demonstration of the point simply, as if I should say that a thing's being unknown were a direct argument of its not being at all; but yet this is something so very near of kin to a demonstration, and so every way serving all the ends and purposes of a demonstration, that whoever has the advantage of it on his side, has as little to fear from an adversary, as he that can produce ten thousand demonstrations. For this is an evi-

dent principle or rule of reasoning, that a thing unknown ought never to be supposed, and therefore till it be supposed, it is the very same thing as to us as if there were no such thing at all. To suppose the being of a thing granted to be unknown, with him who affirms that it is nothing at all, is to beg the question; whereas, to suppose it to be nothing at all upon the same concession, is not to beg the question; I mean any fair or legal one, because on one hand, no one has any right to make that a question which he professes that he knows nothing of; and on the other, every one has a right not only to question the existence, but also to suppose the non-existence of what is granted to be unknown. So that whilst this is granted, in the case before us, I have the same advantage against any one who shall suppose an external world (viz. either in *actu formali*, as in opposition to what I here contend for, or in *actu exercito*, in the resolution of any philosophical or general question, which depends on the yea or nay of this point,) as if I were girt about with ever so many demonstrations.

I might therefore fairly rest here, and save myself the labour of producing any direct or ostensive arguments against the being or possibility of an external world: but to give my reader the best satisfaction I can, and also to establish my conclusion in some measure answerably to the good use and moment of it, I am content to propose the following demonstrations.

CHAP. II.

ARGUMENT II.

AN external world is here supposed to be invisible, even utterly or absolutely so, absolutely inca-

pable of being an object of vision or perception; insomuch, that though it were here supposed that an external world were capable of existing, or that any power were sufficient to produce such a thing or being, yet no power can be supposed to be sufficient to make it visible or seen. For a visible world, as such, is not external, as has been shewn already: so that to say, that an external world may (by any cause) become visible, is a contradiction in terms.

Well now, an external world is supposed to be, or to imply creature; so that if there be any such thing in being, it is so, because God has willed, made or created it.

But for what end, or use, or purpose, can we suppose that God should create an invisible world? A world, which, as invisible, is incapable of being inhabited, incapable of being known? For my part I can think of no use which such a world can be of. And considering that such a world is here granted to be unknown, it is not incumbent on me to shew that it can be of no use, but on them to shew the contrary, who are concerned for the being of it. So that till this be done I have a right to suppose that it is of no use at all, and consequently to affirm that there is no such world.

For though the principle must take its chance to be either admitted or denied, as men shall please to judge (only that, as I observed just now, he must prove his point, who will venture on the denial of it,) still the consequence is good, and must pass with all for demonstration, that a creature which is not, cannot be of any use, is at best but a possibility, but such a possibility as neither will, nor can be produced into act.

This, with certain wits, may appear to be a contradiction; and perhaps I should mend the matter but little by the answer I am most inclined to make them, namely, that though it be so, yet it is neverthe-

less true; nay, that I could easily shew them a hundred such contradictions, which yet they themselves will acknowledge to be true. But I am content so far to favour the iniquity of words, as to explain by a distinction this appearing difficulty.

I say then, that things are possible or impossible, after a twofold manner. One is, when in the idea or conception of the thing there is, or is not, any repugnancy or contradiction.

This is what may be called an internal or intrinsic possibility, or impossibility; possibility where there is not, impossibility where there is, this supposed repugnancy.

The other is, when the repugnancy or impediment is, or is not, (not in the thing itself, but) in the cause, or time, or some other circumstance or affection of the thing. But in this place I am concerned only with the first of these, viz. the cause.

A thing is possible in its cause, when there is, in the idea of its cause, no impediment to be found, forbidding its existence, or which is the same, withholding the efficient from producing it into act; and when the contrary to this happens, then the thing is impossible. For, since every thing exists by its cause, it will as certainly not exist if the cause does not produce it, as if in its own idea it implied a contradiction. And if the supposed impediment in the cause be invincible, the existence of the thing supposed becomes properly impossible. This I would therefore call an external or extrinsic possibility or impossibility. A thing then may be both possible and impossible in these different respects; that is, intrinsically possible, but extrinsically impossible; and therefore of such a thing it may be said without any contradiction, that though it be admitted to be possible, (viz. intrinsically,) yet it is such a possibility, as neither will, nor can, be pro-

duced into act, (viz. by reason of an impediment found in its cause, which though an extrinsic, is yet a real impossibility against the being of it.)

But now this is the case before us, viz. of an external or invisible world. Admitting it to be possible with regard to the thing itself, that such a world should exist; yet an useless creature cannot possibly be made, when we regard its cause, viz. God, who can do nothing to no purpose, by reason of his wisdom. Here then lies the impediment spoken of in the cause, which makes it extrinsically, but yet really impossible, that there should be any such world. I say really so, because the wisdom by which God acts is necessary and immutable; and therefore if it be simply against the order of wisdom to do an useless act, the impediment against the doing of it is to the full as invincible, as if a repugnancy were found in the idea or conception of the thing itself, here supposed to be done, or not done; and consequently an useless effect is a real impossibility.

But I have often found upon examination, that where an extrinsic impossibility lies against any point, we need but search to the bottom of it, and we shall find an intrinsic repugnancy in the thing itself. And this I think I have seen to be the case of an external world, as I suppose will appear from some of the following chapters.

CHAP. III.

ARGUMENT III.

AS for instance. An external world, whose extension is absolute, that is, not relatively depending on any faculty of perception, has (in my opinion, such a repugnancy in its extension, as actually

destroys the being of the subject world. The repugnancy is this, that it is, or must be, both finite and infinite.

Accordingly then I argue thus. That which is both finite and infinite in extent, is absolutely non-existent, or there is, or can be, no such world. Or thus, an extent or expansion, which is both finite and infinite, is neither finite nor infinite, that is, is no expansion at all. But this is the case of an external expansion, *ergo*, there is, or can be, no such expansion.

I know not what will pass with some men for argument, if both the matter and manner of this be not approved of. For first, what can well be more evident than both the premises? That a thing, in the same respect, cannot be both finite and infinite; or that a thing which in the idea of it implies both finite and infinite, is in act neither finite nor infinite; and that what is neither finite nor infinite, is not at all, are (with me, and I suppose with all pretenders to reason,) such prime principles of science, that I must needs depend that these will never be called in question by any but professed sceptics. Then as to the minor, its evidence is to me so glaring, and (in the little conversation I have had in the learned world) so universally assented to, that I am rather inclined here also to make my appeal for, than endeavour to shew the truth of it. This of the extent of an external world, is that which is called *opprobrium philosophorum*, being a point owned by all to have an invincible demonstration, both for and against it. Some indeed, by way of hypothesis, have held it to be finitely, and some to be infinitely, extended, according as either of these has best served the ends of some other points they have been concerned for. But I have never yet met with any one so hardy as, in defence of one, to have endeavoured to dissolve or answer the arguments lying on

the other side of the contradiction. For this reason I need not here name either the one sort, or the other, but conclude outright, even with universal consent, that an expansion external is *both* (that is *neither)* finite and infinite. Then,

Secondly, as to the form or manner of this argument, it has first evidently this to plead for itself, that there is nothing in its conclusion but what is in the premises which shews it to be no fallacy, but a legal and just argument. And also this, secondly, that it is exactly parallel with several arguments which I could name, allowed by all to be good, and even perfectly demonstrative.

As for instance, suppose a man should advance the notion of a triangular square. Or suppose, two persons contending about the attributes of this strange idea: one arguing from the idea of triangle, that it has but three angles; and the other contending that it must have four, from the idea of a square; what could any reasonable standerby conclude from this, but that the thing they are disputing about is nothing at all, even an impossibility or contradiction? Nay, the disputants themselves must needs close in with this manner of arguing; and that on two accounts.

First, in that this manner of arguing accommodates the difference between them, and salves the honour of both. For by this both appear to be in the right in the precise points they are contending for; and wrong only in something which they are both equally concerned for, viz. the supposition of the being of a triangular square, which is the thing supposed by consent between them. But chiefly,

Secondly, in that the person who argues in this manner must be allowed to have the law of reason on his side, and may compel them, on their own principles, to assent to his conclusion. This is done by granting to each party his point, namely,

that a triangular square is both triangular and square or quadrangular. This done, they have nothing to do but to answer each other's arguments, which it is here supposed they cannot do. By this therefore each grants the other to be in the right. So that for a stander-by to grant both to be in the right, is, in this case, a demonstration that they are both in the wrong; or in other words, that the thing they are disputing about is nothing at all.

I have mentioned this *possible*, rather than any *actual*, instance of this kind, because I would give an instance wherein I may be sure to have every one of my side. For certainly no one can doubt whether this be a good argument or not.

A figure which is both triangular and quadrangular, is not at all.

But this is the case of a triangular square.

Ergo, there is no such figure.

The force of this argument has never been disputed and I dare say never will: whereas to have put a case, which has been actually a matter of dispute, (of which sort I believe some might be named,) though equally conclusive, had yet been less plain and evident, because what has been, may be again; and so to some I had seemed to prove a *notum* by an *ignotum*.

But now, in the present case, which is granted to be clear, I have nothing to do but to shew it to be parallel with that which I before mentioned. And this is an easy work. For (as in this possible one about the attributes of a triangular square there *may* be, so) there has actually been a dispute between philosophers concerning one attribute, viz. the extent of an external world. One side, from the idea of its being external, has proved it to be infinite; the other, from the idea of its being created, &c. has proved it to be finite. Both suppose it to

be external, both to be created. At the same time neither of them so much as pretends to answer the arguments on the side opposite to his own; but only to justify his own point directly. And yet both will grant, that if an external world be both finite and infinite, it is the same thing as to say there is no such world.

Well then, here I interpose, as before, and say,

A world which is both finite and infinite, is not at all.

But this is the case of an external world.

Ergo, there is no such world.

Here the honour of both is salved; here both the major and minor are their own; here a stander-by has the same advantage as before; so that what should hinder an easy, and even universal, assent to the conclusion?

CHAP. IV.

ARGUMENT IV.

FROM the *maximum*, I come next to the *minimum naturale*; or to the question about the divisibility of matter, quantity or extension.

And here I affirm in like manner as before, that external matter is both finitely and infinitely divisible; and consequently, that there is no such thing as external matter.

The argument in form stands thus.

Matter which is both finitely and infinitely divisible, is not at all.

But this is the case of external matter.

Ergo, there is no such thing as external matter.

The major of this argument is the first principle of science, it being the same in other words, as to

say, that what is, is, or that it is impossible for a thing to be, and not be. For finite and infinite are just so to each other, as being, and not being. Finite is to be limited, infinite to be not limited. Or rather thus, infinite is to be absolute, finite, to be not absolute. So that it is as plainly impossible for the same thing to be both, as both to be, and not be at the same time, or in the same respect, &c. For both the respect, and time, and every thing else, which is or can be made the condition of the truth of this principle, is also found in the major of the present argument; and consequently nothing can be more evident, than that what is, or in its idea implies both finite and infinite, is not at all.

But now this I say is the case or implication of external matter, which is the minor or assumption of the same argument.

External matter, as a creature, is evidently finite, and yet as external is as evidently infinite, in the number of its parts, or divisibility of its substance; and yet nothing can be more absurd than such an infinite divisibility.

But I need not deduce these things to any farther length, since no philosopher that I have ever met with has ever doubted of this matter, it being universally agreed that there is an invincible demonstration on both sides of this question of the divisibility of matter, so that I have nothing to do but to conclude that the thing or matter concerning which this question proceeds is a mere nothing, or contradiction; yet I expect to be told, that it has been the least of the thoughts of these philosophers to conclude as I here do, since not one has ever doubted of the existence of external matter. To this I answer,

First, perhaps so; but who can help this? Is it not enough for this conclusion, that we are all

agreed in the premises, and that there is nothing in the conclusion but what is in the premises? If in this case men will hold the premises, but deny the conclusion, this, at best, can be no better than inadvertence; but to do this, after the conclusion is formally deduced, or the whole syllogism is laid before them, is no better than errant scepticism. And I must be excused if I contend not with an adversary of this sort. But secondly, one would think by the descriptions which they themselves are used to give of external matter, that all philosophers should be very ready to subscribe to this conclusion for its own sake, as I have partly shewn already, and shall make appear more fully before I finish this work.

Again, I expect to be told that the matter which I here speak of is conceived to be very different from that concerning which philosophers have disputed, in the question about the divisibility of extension, and also in that about the extent of the world, (whether infinite or finite;) particularly that the matter or extension which they speak of is supposed to be visible, whereas that which I am speaking of is supposed to be invisible. I answer,

Perhaps so; I admit that the matter usually spoken of by philosophers is supposed by them to be visible, and that the matter which I am here speaking of is supposed, and also proved, to be invisible. Nevertheless it must needs be granted that the matter spoken of by philosophers is supposed by them to be external; if not, it must be because they hold that visible matter is not external, or, that there is no such thing as external matter; neither of which will, I believe, be easily granted, much less (which is necessary in this place) contended for against me. If then the matter they speak about is supposed by them to be external, this is all that I am concerned for at present; the question between us being only this simply, whether external matter exists, or not?

or, as usually expressed in latin, *An* detur *materia externa?* No, say I; for it implies such and such contradictions, which destroy the being of it, or render its existence impossible. Well; and what will an adversary say to this? Will he deny that it implies these supposed contradictions? No; it is here supposed that all philosophers agree in affirming this point. Will he then deny the conclusion, whilst he affirms the premises? No, certainly; for this is formal scepticism, or no other than a denial of all truth, and reason, and consequence, at once. What remains then, but that we all conclude that external matter is a thing absolutely impossible?

But you will say, to conclude this with consent, is to conclude the non-existence of visible matter, since philosophers pretend to speak of no matter but what they supposed to be visible. I answer,

First, why then I must conclude the same without consent; the damage one would think should not be great, provided it be allowed that my conclusion is true; and for this I appeal to the arguments by which I prove it, and which I suppose may be good, though they should happen to want consent. But, secondly, I deny that the matter concerning the divisibility of which the question usually proceeds, is supposed by philosophers to be visible matter. This is evident from this, that the matter of which they speak, is, and must be, supposed to exist after ever so many divisions of it, even when it is become invisible, by the frequency of its being divided.

It is not therefore visible, but external, matter, considered as external, of which philosophers have disputed; and of which they say that it is both infinitely and finitely divisible and extended. And this idea of its being external, or independent (as to its existence simple) on any mind or perceptive faculty, is so absolutely necessary to both these

questions, that neither of them has any appearance of being a question, upon the removal of this idea, and placing visible in its stead. For a visible world, or visible matter, considered as not external, exists plainly as visible, and consequently, as such, is extended, as such, is divisible. So that after this it carries a contradiction with it, so much as to enquire whether it be extended, farther than it is seen to be extended, or divisible, farther than it is seen to exist. So that however by accident philosophers may have jumbled together the two ideas of visible and external, external is the idea only they are concerned with, and therefore it is external matter alone whose existence is encumbered with the forementioned contradictions; and so incumbered, I say, as to make it necessary for us to conclude that it is absolutely impossible there should be any such thing. But yet so partial have I found some towards an external world, that when nothing has been found, which could with any appearance be objected against the evidence of this and the foregoing argument, they have even drest up formal nothing into the shape of an objection: for I have been sometimes told (and that with an air of unusual gravity, as if the being of a real universe depended on their concern for it; nay, as if religion itself must fail if there be no external world,) that a thing may be, and must sometimes be, judged by us to be true, whose manner of existence we cannot comprehend. That of this sort are several articles of our christian faith, as for instance, the trinity in unity, the incarnation of the son of God, &c. which we believe to be true, though we acknowledge them to be mysteries, nay, and are content to own, that with regard to our shallow reasonings, they are attended also with contradictions. Why then must we conclude that there is no external world, because of the contradictions which

seem to attend the position of it? And to this purpose I find it said by a very judicious author*, that *it is good to tire and fatigue the mind with such kind of difficulties (as the divisibility of matter, &c.) in order to tame its presumption, and to make it less daring ever to oppose its feeble light to the truths proposed to it in the gospel*, &c. I answer,

1. It is a sign indeed that our understandings are very weak and shallow, when such stuff as this shall not only pass for common sense, but even look like argument; and herein I confess my own as well as my neighbour's weakness. However,

2. If we will reason at all, we cannot well have a more evident principle to go upon than this, that *being* is not *not-being*; that *what is, is*; or that it is impossible for the same thing both to be and not be. If so, we must either say that humility of judgment is no virtue, or that there is still room enough left for the exercises of it, whilst we hold this principle without the least doubt or wavering. Nay,

3. It seems to me, that if we will reason at all, we should freely judge of whatsoever we perceive, so as first of all to agree in this, that *whatsoever we perceive to be, is*: for though it were true indeed that there is no such thing as truth, or though the light of our understandings were ever so weak and feeble, yet till we have discovered this to be the case, and whilst we all agree to reason one with another, that must pass for the truth which we perceive, and that must pass for perceiving which at present we are capable of, be it what it will in the eye of a superior judgment or understanding. To boggle therefore at this, is not reasoning, but refusing to reason at all; is not humility of judgment, but open and avowed scepticism? Is not an acknowledgment

* Art of thinking.

of the infinity of truth, but an evil, and profane, and atheistical, denial of it? And yet,

4. Nothing more than this is requisite in the case before us: nothing, I say, but to affirm that being *is*, and not to deny our own evident perceptions. The first of these is the resolution of the major, and the other of the minor, of both the foregoing arguments, whereby I demonstrate the impossibility of an external world: for can any thing be more evident than that finite and infinite are exclusive of each other; and that an idea which implies both is an impossibility in fact? And can we pretend to perceive any thing at all, when we pretend to doubt whether this is not the fact or implication of external matter? Should we doubt in this manner, if the subject spoken of were a circular square, or triangular parallellogram? If not, I would fain know where our ignorance lies, which is the foundation of the objection? We are ignorant indeed that there is any such thing as external matter, (and one would think for this reason we should be so far from having any partiality towards the being of it, that we should conclude of course that there is no such thing in being,) but on the other hand we cannot so much as pretend ignorance of the premises by which this conclusion is enforced. They are as evident as the light, and also (as far as ever I could inform myself) universally acknowledged: where then is the difficulty, supposed by the forementioned author, in the question about the divisibility of matter, &c. wherewith it is so good to fatigue our presumptuous minds? Why, nowhere that I can think but here, viz. to conceive how it is possible that such a thing can exist, whose idea implies so manifest a contradiction: and if this be all the difficulty, it immediately vanishes, or loses its name, as soon as we suppose that there is no such thing or matter, or make this the ques-

tion, whether there be any such thing, or not? For then, instead of difficulty, it becomes light and argument, and is no other than a demonstration of the impossibility of its existence. But now,

5. This does not in the least affect so as to become a parallel case with the doctrine of the trinity, &c. and that for several reasons. As,

First, In that all who believe this doctrine are very ready to acknowledge (and that with reason too) that there is something incomprehensible in it; whereas in the demonstrations by which external matter is proved to be both finite and infinite, (viz. in extent and divisibility,) I have shewn already, no ignorance can be so much as pretended. Then again,

Secondly, the articles of our faith concerning the trinity, &c. are, by consent, allowed to be exempt or particular cases, such as are not to be made precedents for our believing any other points, notwithstanding the difficulties which are seen to attend them. And this,

Thirdly, for a very good reason; namely, because as to the truth or fact of these doctrines we have an evidence irrefragable from another quarter, (which is at least equal to the evidence of reason,) viz. the word of God, which assures us of these things, whereas we are, or are supposed to be, wholly ignorant of the being or existence of an external world. And after all,

Lastly, I utterly deny that there is any contradiction in the doctrines of the trinity, &c. even rationally considered, which circumstance makes this and the case of an external world to the last degree unparallel. But now, it is the parallellism of these points which is the thing contended for in the objection; and if so, where is the man that with a serious face will argue this matter with me? Who

will say, I will not give up my judgment for an external, invisible, unknown world, notwithstanding the manifest contradictions which attend the mention of it, on any other terms but that of affirming or granting that there is a contradiction in the doctrine of the ever-blessed trinity? A socinian or arian will not say this, it being evident that the objection is very nonsense in their mouths; and sure I am that an orthodox person would be ashamed to say so: and yet, if it be not granted immediately that there is (as far as our understandings can dive or penetrate) a contradiction in the supposed articles of the trinity, &c. the objection (even on this account alone) is without all foundation, and is no other than an *ignoratio elenchi*, in other words, talking of chalk with those that talk of cheese.

CHAP. V.

ARGUMENT V.

ANOTHER argument, whereby it is to be demonstrated that there is no external world, is, that in such a world it is impossible there should be any such thing as motion; or rather (lest this should not seem absurdity enough to stop men's judgments in favour of such a world) it may be proved from the most simple and evident ideas, both that there may, and also that there cannot be, any motion in it.

That there may be motion in an external world, is sufficiently evident from this, that it is supposed to be a creature: if so, I have an almighty power on my side to help forward the conclusion, namely, that it is moveable. And the argument in form will stand thus.

The power of God is sufficient to move created matter,

But external matter is supposed to be created;

Ergo, the power of God is sufficient to move it.

On the other hand, nothing is more evident than the impossibility of motion in an external world, considered as external. And that, first, in the whole; secondly, as to the several parts of it.

I. As to the whole I argue thus;

An infinite body or expansion is not capable of being moved by any power whatsoever,

But an external world is infinite in expansion;

Ergo, an external world is absolutely immoveable, or incapable of being moved by any power whatsoever.

That an infinite expansion is absolutely immoveable is too evident to be proved, unless this will be admitted as something more so; namely, that motion supposes a place possessed, and afterwards quitted for another, which yet is impossible and contradictory, when affirmed of an expansion or body actually infinite, which, as such, implies the possession of all place already; which circumstance therefore makes the motion of such a body or world a fact absolutely impossible. And then,

Secondly, that an external world, as such, is infinite in expansion. I appeal to those arguments whereby this proposition is usually proved by philosophers, and which are allowed by all to be demonstrative. I shall not here fill my paper with the mention of any one, because I suppose my reader does not need my information, and also because it will be time enough to do this, when I am advertized of an adversary. I shall only observe this, (as believing it may be of some use to those who shall be at the pains of considering this matter,) namely, that whatever arguments have been used to prove the world to be infinite in extent, will be found to have proceeded on the formal notion of its being external; whereas those which have

been produced on the contradictory part have been altogether silent as to this idea, and have proceeded either on the idea of its being created, or on the absurdities attending the supposition of infinite; by which proceeding it has still been granted, that notwithstanding these arguments and absurdities, an external world, as such, must needs be infinite. Since therefore an infinite world or expansion is not capable of being moved, I conclude that an external world, considered in the whole, is a being absolutely immoveable.

II. In like manner it seems to be impossible that there should be any such thing as motion in an external world, considered in the several parts of it.

For motion is supposed to be a translation of a body from one point or place to another. Now in such translation the space or line through which the body moved is supposed to pass, must be actually divided into all its parts. This is supposed in the very idea of motion: but this all is infinite, and this infinite is absurd, and consequently it is equally so, that there should be any motion in an external world.

That an external line or space is compounded of infinite parts or points, is evident by the same argument by which any body or part of matter (supposed to be external) is proved, and also allowed to be so; namely, from the idea of its being quantity, body, or extension, and consequently divisible, and not annihilable by division, which last is supposed in the idea of its being external. But then, on the other hand, to affirm that a line by motion or otherwise is divided into infinite parts, is in my opinion to say all the absurdities in the world at once. For,

First, This supposes a number actually infinite, that is, a number to which no unit can be added,

which is a number of which there is no sum total, that is, no number at all; consequently,

Secondly, By this means the shortest motion becomes equal to the longest, since a motion to which nothing can be added must needs be as long as possible. This also,

Thirdly, will make all motions equal in swiftness, it being impossible for the swiftest in any stated time to do more than pass through infinite points, which yet the shortest is supposed to do. To which may be added,

Lastly, That such motion as this, however short in duration, must yet be supposed to be a motion of all or infinite ages, since to every point of space or line through which any body is supposed to pass, there must be a point of time correspondent: but infinite points of time make an infinite time or duration, &c.

These are some of the absurdities which attend the supposal of motion in an external world; whence I might argue simply, that such a world is impossible: but lest, as I said before, this should not be thought absurdity enough, that is, lest any one should admit such a world, notwithstanding the impossibility of motion in it, I rather chuse to defend and urge both parts of the contradiction, and conclude the impossibility of the being of such a world, from both the possibility and impossibility of motion in it. The argument in form stands thus.

A world, in which it is both possible and impossible that there should be any such thing as motion, is not at all;

But this is the case of an external world;

Ergo, there is no such world.

I suppose I need not here remind my reader that I have proved already, and that it is here supposed, that a visible or sensible world is not external; neither, if he has at all gone along with me

in this discourse, need I undertake to shew that these absurdities about motion do not in the least affect a sensible or visible world, but only an external world. Nevertheless, if upon a due perusal of what I have here written, this seems yet to be wanting, I shall be ready, as soon as called upon, to give my reader the best satisfaction I am capable of as to this matter.

CHAP. VI.

ARGUMENT VI.

AGAIN, it is with me an argument against the being of an external world, that there is no hypothesis of vision, that I can imagine, or ever heard of, on the supposition of such a world, but what in the fact or act of it implies an impossibility.

I pretend not to have conversed with the writings of philosophers; I am sure not enough with their persons, to know all the opinions there are or may have been about the method of vision; and so must content myself with those that I have met with, which are only these two that at this time I can remember, or think worth the repeating.

One is the Aristotelian, or old account, which supposes certain images to scale off from external objects, and fly in at the eye, &c. and the other is the Cartesian, or new hypothesis, which, instead of images, or resemblances of objects, scaling off from the objects themselves, accounts for vision from the reflection of subtle matter, (viz. that which proceeds in a direct line from the sun) from the object to the eye, &c.

I stand not here to enquire which of these is true, or the most probable account of vision, on the supposition of an external world, being here concerned not in physics, but metaphysics, or an enquiry

into simple, not hypothetical, truth. Neither am I concerned to consider these two hypotheses apart, though they are so vastly different; for as different as they are upon the whole, they agree in all that which I am concerned to take notice of, namely, that the act of vision is the effect of certain parts of matter, (whether images, or not,) which proceeding from the objects, respectively affect or act upon the optic nerve, &c.

This is that which I take to be an impossibility, or so attended with difficulties in the *actu exercito* of it, as to be the nearest to an impossibility of any thing that we know of. For,

First, these parts, as being material or extended, must needs be impenetrable, that is, they must each possess a space by itself, and cannot (two or more, much more an infinite number of them) be crouded into one point, or the place of one. Nevertheless it is possible for a man's eye in one and the same point to see a vast and almost infinite number of objects which are in heaven and on earth. There is then a necessity that from each of these bodies there should be communicated or sent a line or train of subtle parts or images upon the one point of the eye, which, how it is possible to be in fact, I leave to be considered by all those who profess to know what they mean, when they say, bodies are impenetrable.

Secondly, there is not any one point in the universe, wherein the eye supposed or fixed, cannot perceive an innumerable company of objects. There is not then any one point in the universe, wherein lines of subtle matter, or images, from all these supposed innumerable objects, do not actually concentre. If this is thought possible by any, I must be content to leave it with them, since nothing is more evident with me, than that the fact of this is utterly impossible.

From these and such like absurdities, which attend every hypothesis of vision in an external world, I think I am bound to conclude that there is no such world. For it seems to me at present, that if there is an external world, one or other of these accounts of vision must needs be the true, that is fact. But as these appear to be impossible in fact, they seem to derive their impossibility upon the world which they belong to, or which supposes them.

This, I say, will follow, till some other account of vision, in an external world, be produced or named, which is not liable to these, or any like absurdities; or which even on the concession of an external world, may not plainly be demonstrated to be false.

In the mean time nothing of all this affects a sensible or visible world, supposed and granted to be not external. For then, any hypothesis of vision, which has no other falsehood in it, but what is derived upon it from the non-existence or impossibility of an external world, will be the true hypothesis, or account of vision. For, by truth in this case, will then be meant no other than the will of God, the great author of nature, who giveth us such and such sensations, by such and such laws. And in this sense, a law or rule of vision, may be possible and even true in its cause, though it has no truth in its self, or is impossible in fact. And so, with this explanation, I am very ready to say, that the second, or Cartesian account is the true hypothesis of vision. For, though there be indeed no external world, yet such a world exists as far as it is possible; and it has been granted in the beginning, that it is according to the will of God, that the visible world should carry in it every character of being external, except the truth of fact, which is absolutely impossible. But the disoovery

of this last is within the province of metaphysics, which has to do only with simple being or existence; whereas this about the method of vision is a question of a grosser size, and a much lower degree of abstraction; and its resolution is to be sought for only in the will of God, by which he willed his creatures, viz. material creatures. But in this *will* we see an external world, even an external visible world, as I observed just now. So that this being the first will, must be first supposed, or taken for granted by consent. And then, I believe, it will be found that this account of vision (as well as several parts of the same philosophy which have been objected against) will have lost all its difficulty, and must pass for true.

CHAP. VII.

ARGUMENT VII.

AGAIN, as by an external world we are supposed to mean certain objects which do not exist in, or in dependance on, any mind or faculty of perception, at least of any creature; so when I contemplate the idea of such a self-subsisting being, I profess I am put hard to it to reconcile it with the character of a creature, or to discover how it can be understood to subsist at all on the mind, or will, or power, of God, who is supposed to be the creator of it. For,

First, as to its *being simply*, it is past my skill to distinguish it from being simple, absolute, or universal. We are taught indeed to say, that every creature of God needs the same power to preserve, which was necessary to the creation of it; and christian philosophers are generally agreed, that this power of God is so necessary to the preservation, or

continued being, of every creature as such, that it must return to its primitive nothing, merely from the abstraction or withdrawing of this power.

But do we understand what we say, when we apply this doctrine to an external world, either in the whole, or in the several parts of it? We see it indeed in the idea which we have of creature, and in the absurdities which attend an absolute existence applied to any thing but God alone; but do we see any such dependance as to being or existence in the idea, which we conceive of an external world? Consider but this house, this tree, this any thing amongst the objects of an external world, or of the visible world, supposed (as usual) to be external, is there any sign of weakness or dependance in any of these things considered by us in this view? Will not an external house stand or be, unless a foreign power continue to support it? Or does it seem to us to be any thing like those things of which we speak, when we speak of certain beings which have no subsistence of their own, no truth of being but in relation or resemblance, and which would cease to be, barely by an abstraction of a supporting power, which is different from the things themselves? A house indeed may be a good, or useful, or convenient house, only as it stands related to an idea in the mind, or intellect of its maker, and may be said to stand in its present form, only as supported by certain foreign causes; but we are speaking here, not of the external form, but of the simple truth or being of things; and even in this respect we say that things subsist altogether by a relation to the intellect, or in dependance on the will of God. But I say, does this seem to be the case of an external piece of matter? Do we conceive this as having no absolute being, or substance of its own? as a mere nothing, but by resemblance, and what would cease to be on the instant of the cessation of God's will to preserve

it? I know what another may answer to all these questions, and I cannot help it, let men answer what they will; but still I must insist and say, that if another will affirm, that he thus conceives of external matter, he must teach me to do the same from some other idea besides that of creature, namely, from the consideration of the *thing itself;* or else I must conclude that he affirms this, not because he understands any thing of the matter spoken of, but because the truth in general forces him to say this. But this is the chief thing which makes against his point. For to say that external matter exists wholly on the will of God, because this is the condition of a creaturely existence, is only to say in general, that the existence of a creature is necessarily thus dependant. But this is what I affirm; and hence arises the difficulty, viz. how we can conceive external matter to exist by this rule, or how to reconcile the absolute and stable existence of matter supposed to be external, with this necessary and indispensable character of a creature's being. My business is to deny that there is any such creature for this reason, because it carries in the idea of it an absolute kind of existence, which no creature is capable of; and for this I appeal to the judgment of all others; so that if another will yet contend that there is any such creature, he must not argue with me that it does and must so exist because it is a creature, for this is plainly begging the question; but must make answer on the other hand, how a creature, which is and must be understood to have a self-subsistence, or a proper substance of its own, can be said to exist, whilst it is acknowledged, as before, that every creature, as such, exists altogether in dependance on the power or will of God. This is the difficulty which attends an external world, considered in its several parts. And this,

Secondly, is rather increased, if we consider it in

the whole; for then nothing but its expansion comes under consideration. And this is plainly infinite. And if not infinite *nothing*, must be infinite *something*, that is, being or substance. But is there any thing in this idea which squares with the indispensable character of a creature? For this I appeal to every one's idea of an expanded universe, particularly to theirs, who (if I may guess,) are not a few, who from the consideration of the firm and substantial existence of the visible world, supposed by them to be external, think themselves compelled to believe, that simple space or extension is the very substance of God himself; and therefore how to conceive it possible that such a thing should exist, which on one hand we are compelled to call a creature, and on the other cannot forbear to understand as God, I leave to be explained by those who yet retain any fondness for such a thing. Thus much of the existence simple of an external world; I come next to consider the *unity* which it implies.

Here then I observe, that an external world implies in it all the unity, which any being whatsoever, which universal being, which God himself is capable of.

Consider it in its whole, and it has the unity of infinity. It is one alone, and is absolutely incapable of being multiplied by any power whatsoever; which is as much as can be said of God, and even more than they have a right to say, who consider him, not as universal, but some particular being. Consider it in its several parts, or bodies included in it, and each particle of matter has such a unity in, or identity with itself, as I think should not be ascribed to any thing but God, who alone is the same yesterday, to-day, and for ever. Again, I consider, that an external world, is independent on the will of God, considered in its expansion, which will and must be

infinite, whether God pleases to make, or will it to be so or not, supposing only that he wills to produce or make any the least extent, or that any the least part or extent is made, or in being.

As for instance, let God be supposed to will the being of a certain cubical part of matter or extension, about the bigness of a common die. This, I say, is impossible in fact, and this draws another impossibility after it, which is, that by this the will of God is over-ruled or frustrated by the work of his own hands. For what should bound this cubical extent? It must be something, or nothing. If nothing, it is plainly infinite; if something, it must be matter or extension; and then the same question returns, and will infinitely return, or be never satisfied under an extent actually infinite. But this is an independency of being, which I think can belong to no creature, it being the same with that which we use to call necessary existence. I conclude therefore that there is no such creature as an external world.

Lastly, much the same sort of difficulty occurs if we consider it in not being, after it has been supposed to exist. That God can annihilate every creature which he has made, is, I think, a maxim undisputed by any; if so, I think it plainly follows, that that which in its idea implies an utter impossibility of being annihilated, is a thing in fact impossible. But this, I say, is the case or implication of an external world. This is evident from the foregoing article, which shews the absolute necessity of its being infinite, on the supposition of the being of but the least part or particle of it: for certainly if nothing less than infinite can exist, or be made, no part of this infinite can be unmade, or annihilated. And therefore though in words we may say that God can annihilate any part of it, yet we utter that in words, of which we can have no con-

ception, but rather the contrary to it. For annihilate it in supposition as often as you will, yet still it returns upon you; and whilst you would conceive it as nothing, it becomes something to you against your will; and it is impossible to think otherwise, whatever we may say.

I believe I should lose my time and pains if I should attempt in this place to shew, that the supposition of a visible, which is not an external world, is attended with none of these difficulties. This would be a thankless office with all those who are not yet convinced, but that an external world may yet stand, notwithstanding these pretended difficulties; and it would be an injury to those that are, as preventing them in certain pleasant and very easy considerations. And so I leave it to take its chance with all my readers in common.

CHAP. VIII.

ARGUMENT VIII.

ANOTHER difficulty which still attends the notion of an external world, is, that if any such world exists, there seems to be no possibility of conceiving, but that God himself must be extended with it.

This I take to be absurdity enough in reason, to hinder us from supposing any such world. But so unfortunate are the stars of this idol of our imagination, that it is as much impossible, on another account, that it should exist, though this were no absurdity, or though it were supposed and allowed that God himself were extended.

I suppose then in the first place, that God is not extended. If so, I say there can be no external

world. For if there be an external world, and if it be a creature, we must suppose that God is every where present in, and with it; for he is supposed to preserve and do every thing that is done in it. To deny this, is to shut him out of the universe, even altogether to deny his being. On the contrary, to affirm that he is thus present with every part and particle of it, is to make him co-extended, which is contrary to the supposition.

Yes, it may be said, God is extended, and consequently there may be an external world, notwithstanding this dilemma. I answer,

Secondly, be it so that he is extended, (to humour a corrupt and absurd itch of argumentation,) yet this avails nothing towards the being of an external world, but directly towards the non-existence of it. For if God be extended, and as we must also say infinitely extended, where shall we find room for an external world? Can two extensions, infinite extensions, coexist? This is evidently impossible. So that all the choice we are left to is to acknowledge God or an external world; which, I think, is a choice we need not long be deliberating upon. I conclude, therefore, that if God is, there is no external world.

I know but one way of answering this argument, and that is, to affirm that an external world is God himself, and not a creature of God. But till some one shall be so hardy as to appear publicly in defence of this, I shall think it but a loss of time and pains to consider of or debate it.

CHAP. IX.

ARGUMENT IX.

I promised in some part of argument IV. that I would consider farther of what philosophers say of

external matter; and here I intend to be as good as my word.

I have shewn in my former part of this treatise*, that the matter so much disputed of by philosophers is not understood by them to be visible. This of itself is an argument that they had, or could pretend to have, but a very faint and imperfect idea of the thing they were speaking of. Accordingly, I shall here proceed to shew, that they neither did, nor could, pretend to mean any thing at all by it. And,

First, for the definitions which they have delivered to us of matter, Aristotle defines it thus. Ἡ ὕλη αἴτιον ἐξ ὰ γίγεταί τι. *Materia est ex quâ res, vel aliquod est.* This, by no inconsiderable philosopher †, is called, *optima definitio materiæ.* And the same is by Baronius (Metaph. page 172,) defined thus. *Materia substantialis est substantia incompleta in quâ forma aliqua substantialis existit.* And sometimes again thus, *Substantia incompleta capax formæ.*

These are all the definitions that I shall mention, and these I suppose are sufficient to convince us that they meant nothing at all by the matter which they here speak of. For what is there in either of these definitions besides the indeterminate notion of being in general, that is, something, but nobody knows what, or whether it be any thing at all or no. This I say is all that I can make, or understand by it; and this amounts to the same, as if they had told us in plain words, that they mean nothing at all. But this,

Secondly, they tell us yet more expressly in the descriptions and characters which they give of matter.

* Chap. I. Sect. ii. Argument 5. † Scheib. Met. Cap. 22. 158.

As for instance Baronius * delivers it as the common sense of all philosophers, that *Materia non est in prædicamento*, and that *non habet proprie dictum genus*. This is the same as if he had told us in express words, that the most they mean by it, is being indefinite, or something, but they know not what. For that which is not in the predicaments, is allowed to be neither substance nor accident, (unless it be God, or universal being,) and what is neither of these is confessedly nothing at all.

Again, St. Austin is always quoted by philosophers for his description of matter, as an explanation of the common meaning, and it is thus expressed †. *Materia est infima omnium rerum, & prope nihil.*

Much after the same manner it is described by Porphyry ‡, *Materia prima ex se est incorporea, neq; intellectus, neq; anima, neq; aliud secundum se vivens, informis, immutabilis, infinita, impotens, quapropter neque ens, sed verum non-ens.* But this is a little more than *prope nihil*, and I suppose may be said to amount fully to the sense of the English word, *nothing*.

In like manner Aristotle himself, who has given almost all other philosophers their cue, is for nothing better known than for his most intelligible description of substantial matter. He calls it *nec quid, nec quale, nec quantum;* to which I think I may fairly add, *nec aliquid*, as the proper sense and consequence of this description. Nay, to confirm this as the true interpretation and design of his words, I have many times seen him quoted by his followers, for saying positively that *materia est non ens;* one instance of which I particularly remember, viz. Scheibl. Metaph. Cap. 22. 167.

* Met. p. 189. † L. 12. Confess. cap. 7.

‡ Lib. de Occasionib. c. 21.

Perhaps so, you will say, but yet all philosophers are agreed in the being of it, and all argue it to *be*, or to have a *real* existence. I answer,

First, If they will contradict their own positions, as it is not in my power to help, so it is hard that I should suffer for it. But, secondly, how is it that they argue the existence of matter? Do they argue it with a supposed adversary, or only with themselves? If with themselves only, this is nothing at all; for in this case they may have the question for asking; and so this kind of arguing is only grimace and banter. But if they argue it with an adversary, who is supposed to doubt it, I am this adversary, and let their reasons be produced.

In the mean time I affirm that they argue only with themselves; that is, they grant themselves the question, upon all occasions, and whensoever they please.

Their arguments are such as these, some of which I have mentioned already*.

Matter *is*, or exists, say they, because it *is*, or is *supposed to be* created. Here the adversary, if any, is supposed to grant that it is created, but yet to doubt whether it is, or exists, or not. That is, he is supposed to be a drivelling fool, or no adversary at all, which is plainly the case.

Again, matter *is*, or exists, because it is supposed to be part of a *real compositum*. This is the very same case as before.

For surely whoever can be brought to grant that its a real part of a compositum, cannot be supposed to doubt whether it exists or not.

Again, if matter were nothing, it could do nothing, it could not be the subject of generation and corruption; but this last is supposed (thanks to the kind opponent!) *Ergo*, matter is not nothing.

Again, (saith Christopher Schiebler, Cap. 15, 45.)

* Part I. Chap. i. Sect. II. Arg. VI.

Materia habet essentiam, quia ens est. And with the same ease you are told by all philosophers together, that *ens est quod habet essentiam.* This is round about our coal-fire, in other words, arguing in a circle, or no arguing at all.

Again, (Cap. 22, 167.) he puts the question simply, *an materia sit ens.* And this is the resolution of it. If matter were not *ens,* it would be the same thing to say, that any thing *fit ex nihilo,* as *ex materiâ.* And again, it must be something, because something is constituted of it.

These and such like (for I am tired with repeating them) are the mighty arguments by which philosophers demonstrate the being of external matter. If you will take their words you may; for I think nothing is more evident than that this is all you have to do in the case; unless (which I think much more advisable) you will chuse to believe with me, that they never designed any other than to amuse the ignorant, but yet to give every intelligent reader an item, by this procedure, that the matter they are speaking about is nothing at all.

If so, I have a vast authority on my side: which, if not sufficient to inforce the conclusion simply with all readers, because some there may be who have but little opinion of this kind of authority, yet with all must have this effect, to remove the prejudice which may lie on their minds against this my conclusion, on the account of its appearing strangeness and novelty. And though some authors on certain subjects may have good reason rather to cherish than lessen the opinion of their novelty, yet considering all things, if I were certain to have removed what these are supposed to desire by any thing I have said in the present chapter, I am persuaded it would avail me more in the event, than ten thousand the most evident demonstrations without it. And indeed it was the prospect of this effect

alone, which induced me to number this chapter amongst my arguments against the being of an external world.

CHAP. X.

Objections answered.

BUT now it is time to attend to what may be urged on the other side, viz. in favour of an external world.

But what favour can belong, or be due, to that which is, or can be of no use, if it were in being, which is all over contradiction, which is contrary to the truth and being of God, and after all is supposed to be utterly unknown? Who would ever attempt to form an argument for the being of such a thing as this? For as unknown, it must be supposed to be nothing, even by those who are preparing themselves to prove that it is something. So that well may all particular objections be said to be false or insufficient, when it is against the supposition of the question to suppose any objections at all, or but the possibility of an objection.

Nevertheless, where men are thoroughly inclined to hold fast their point, notwithstanding all the evidence in the world to the contrary, there is a possible room for two or three things, which, for aught I know, some persons may call objections. And they are these that follow.

Objection 1.

Does not the scripture assure us of the existence of an external world.

Answer.

1. Not as I know of. If it does, you would

do well to name to me that text wherein this is revealed to us; otherwise, I have no way to answer this objection but that of taking into consideration every sentence in the whole bible, which I am sure you will believe is more than I need do. But,

2. To do this objection all the right I can, I will suppose a passage or two in the word of God; and I should think, if such a one is any where to be found, it will be in the first chapter of Genesis, where Moses speaks of the creation of the material world. Here it is said, that *in the beginning God created the heaven and the earth*, and also that all material things were made some days before the first man, and so cannot be said to exist only relatively on the mind of man. To this I answer,

1. This objection from scripture is taken from Mr. Malebranche*, and is his last resort on which to found the being of an external world. But then the external world, which he contends for, is proved by him before, and here supposed to be no object of sense, and consequently invisible. And it was for this reason (it being an objection peculiar to this author) that I deferred the mention of it to this place, where also an external world is supposed to be invisible. Here then my answer to the author is this, that the tendency of this passage of scripture is not to prove the being of an external (supposed to be an) invisible world, but the external being or existence of the visible world: for it is here supposed that the visible world existed before the first man saw it. But this is as much against himself as me, and therefore is no objection, as coming from that quarter. But another may think that there is an answer due, not only to the author, but to the objection itself. Be it so, I answer,

2. That it seems to me there is nothing in this

* Search's Illustr. Tom. 11. p. 114. Taylor's Translation, Ed. 2.

passage which affirms the visible world to be external. And my reason for this is, because there is nothing in it but what is very consistent with believing that the visible world is not external.

For first, is it said that God created the heaven and earth? Meaning by it, that all those things which either we or any other intelligent creatures behold, are not their own causes of existence, or of an existence necessary, but receive and derive their whole being from another cause, viz. God. Is any thing of this denied in consequence of affirming, that a visible object, as such, is not external? Or, does this make it to be of necessary existence, or to be its own cause, or to be the effect of any thing but the will of God, who after the counsel of his own will gives or causes such and such sensations in us? Or, secondly, is there (as some learned interpreters have thought) a particular sense and meaning in the words, *in principio*, Ἐν ἀρχῇ or בראשית, as if one design of the text was to tell us, that God the father made all things by and through, and in, his Son, who is frequently in scripture characterized by this, as by a proper name? If so, is it inconsistent with this doctrine to hold that a visible object, as such, is not external to the mind or faculty which perceives it? So far from this, that this doctrine seems to be intelligible only on this hypothesis; and I think I have shewn already, that an external world, as such, (whether visible or invisible) is of too absolute an existence to exist only in the mind or will of God, or the son of God, as every creature is said to do in this text. So that if this text, thus interpreted, proves any thing to the present purpose, it proves the contrary to that which it is alledged for. Or, thirdly, is it said, that the visible world existed, or had its being, before the first man Adam was created? And did it not thus exist when Ἀρχή beheld it, when it had past the Wisdom, and was

come into the will of God? Or might not the angels see and live in it, (who knows how long) before the man whom we call Adam was produced into being? Or, lastly, must all this go for nothing because of the little syllable *the*, which is prefixed in the text to the words heaven and earth? as if by this we were obliged to understand an absolute and strict *identity* between the visible world, considered in the will of God, or in the minds of the angels, and that which was afterwards perceived by Adam? This is a slender thread indeed, whereon to hang the whole weight of an universe. But must I myself be forbid the use of this important word *the*, because I hold that a visible object is not external; and because in consequence of this position there will be found only an identity of *similitude* between the visible world which God made in the beginning, and that which Adam had a sensation of; and consequently between that which Peter and that which John sees, at the same or different times? Must I never say that I have seen *the* sun, because on my hypothesis the sun which I am supposed to see, is not the same strictly with that which God seeth, or which is seen by another person? And must I for this reason never use the expression of *the* visible world, *the* heaven and earth, &c.? But then, will that be denied to God, which is and must be allowed to me? Where then is there so much as an appearance of an objection in the text before us? For my part, I can see none, either in this, or any other that I know of, in the word of God, but what is fully answered in what I have replied to this; and therefore cannot but believe that it would be time ill spent to suppose or name any other. Yet, thirdly, others I might very easily name, such as those which speak of the apparition of angels, of several miracles, particularly that of coming into a room whilst the doors were shut, &c. which suppose

the visible world to be not external; and this would be turning the objector's cannon against himself. But I shall spare my reader, the objector and myself, and so add no more particulars to my answer in this place.

Objection 2.

Is there no allowance due or to be made to that strong and natural inclination which all men have to believe an external world?

Answer 1.

You may remember the mention of this objection* before, where I told you it is the argument by which Mr. Des Cartes satisfied himself of the existence of an external world.

In my answer to it I supposed two things, either that by an external world was meant the being of a world, which, as external, is supposed to be invisible, or the external being of the visible world. To the last of these meanings I have given in my answer, which my reader either does or may recollect at pleasure. I am now (according to my promise in that place) to make answer to this objection in the first of the forementioned meanings.

This, in all right and reason, should be the true intent and meaning of this great philosopher. For my own part I think I could very easily shew, that either he must mean this, or be inconsistent with himself, which is to mean nothing at all; and if so, the objection is answered before any part of it is considered. But I need not be at the trouble of entering into this inquiry, it being sufficient in this place to shew, that in the sense supposed it has not the reality, or so much as the pretence, of being an argument. And that is done in a word, by de-

* Part I. Chap. II. Objection 3.

nying the supposition of it, which is, that we have any the least inclination to believe the existence of an external world, supposed to be invisible. This is evident at first sight, and yet this alone destroys the whole force of the objection. "Strange! That a person of Mr. Des Cartes's sagacity should be found in so plain and palpable an oversight; and that the late ingenious Mr. Norris should be found treading in the same track, and that too upon a solemn and particular disquisition of this matter. That whilst on one hand they contend against the common inclination or prejudice of mankind, that the visible world is not external, they should yet appeal to this same common inclination for the truth or being of an external world, which on their principles must be said to be invisible, and for which therefore (they must needs have known if they had considered it) there neither is, nor can be, any kind of inclination."

Well, you will say, but is there no allowance due to the natural inclination, which we all have to believe that the visible world is external, and consequently this way, that there is an external world.

Answer 2.

Yes certainly, provided you believe the truth, viz. that there neither is, nor can be, any such thing as an external world, you may freely make use of the common language, (which is a creature of God, and which by his messengers, and even in his own person, he has sanctified to us the use of, if we believe the truth,) notwithstanding that there is scarce a word in it, but what supposes the being of an external world, or that the visible world is external. It is the truth which makes us free, and they only are in bondage who are ignorant of the truth, or refuse to admit it. If therefore it be true, that there is no external world, common language is indeed

extremely corrupt; but they only are involved in this corruption who know not this truth, or deny the evidence of it. And the same arguments by which it is demonstrated to be a truth, prove the use of all language unclean to such as these. For such are servants to the power of a corrupt language, and know not their right of freedom from it; and this makes them guilty of all the errors which it supposes. Whereas those who know and believe this truth, are free to use any language, or way of speaking, wherein this truth is not formally or directly contradicted, without being accountable for the corruption of human language. Thus we believe the circumvolution of the earth, and the central rest of the sun, according to the *Copernican* system; but yet so much is due to the natural inclination which we all find in ourselves to believe the contrary, as to excuse and justify us in the use of a language altogether *Ptolemaic*. Thus we know and can demonstrate, that the light which we behold is not any property or affection of the sun, supposed to be in the heavens; but an affection in, or belonging to ourselves; yet we are altogether free from the error of supposing the contrary, though we often say that the sun is luminous, or words to that effect.

Thus again, when the sun shines full in our face, though we know for certain that the pain we feel is not in our eye, but only in our souls, yet so much is due to the natural inclination, whereby we judge that all sensations are in our bodies, that we are free on a thousand occasions to suppose the contrary in words, as we always do when we say, that the light of the sun afflicts our eyes, or makes them sore, that our head or tooth aches, or other words to this purpose. Thus lastly, (to go but one step higher, even that one which mounts us into that region of truth or abstraction, which the present theory supposes us to be in,) though we know (as by this time I hope we

know) that an external world is a being absolutely impossible: *yet*, or rather *because* we know this, we are, on infinite occasions, free from the error on the contrary side, though we use a language which continually supposes the visible world to be external. This I say is the liberty of believing the truth, and this truth thus believed, does so fully sanctify even a corrupt and erroneous language to our use, as to make it our *duty*, as well as *liberty*, (even a debt we owe to the great Author of Nature and of language,) to express our minds to each other in a way suitable to our present state, though both our nature and our language suggest and suppose the contrary to this truth. And now I hope this objection is fully answered. But I expect another in its place, (which is near about the same as to force and consequence,) and that is to be told.

Objection 3.

That the late judicious Mr. Norris, who (in his Ideal World, vol. i. chap. iv.) purposely considered this question of an external world, was yet so far from concluding as I have here done, that he declares it to be no other than errant scepticism to make a serious doubt or question of its existence.

Answer.

I have chosen to place this in the form of an objection, that I may seem rather to defend myself, than voluntarily oppose this author, for whose writings and memory I have a great esteem. But what shall I say in this case? Must I give up all the arguments by which I have shewn that there is no external world, in complaisance to this censure, because it is the great and excellent Mr. Norris's? But has he supported this saying by any arguments in favour of that which he calls it scepticism to doubt

of? Has he proved an external world to be of the number of those evident truths which are of no reasonable doubt, nor to be seriously questioned by any sober understanding? Or so much as pretended to answer any argument alledged for its non-existence? No, not a word of this is to be found in the whole chapter, unless the argument from inclination, which is the subject of the former objection, will be here named against me. Well then, and must this too pass for an argument, notwithstanding that I have shewn the weakness of it? And so, must all that I have hitherto contended for, submit to the power of this great authority, on peril of my being thought a sceptic?

But is not this the way to be betrayed into the very dregs of scepticism, to make a doubt of one's own most evident perceptions for fear of this imputation? Or can a man give better proof that this does not belong to him, than by putting (as I have all along done) his cause or assertion on the issue of a fair debate on plain reason and argument? And can any thing be a plainer mark of scepticism than to refuse to stand, or be concluded by this issue, appealing from thence to judgment or authority? This is what I said from the beginning, and I have shewed it, I think, in every instance of an objection since, that my adversary all along is no other than prejudice, which is formal scepticism; and yet nothing has been so constantly charged against myself as this very imputation. And it is this alone which has made it so considerable with me, as to set formally about an answer to it.

But to speak particularly to the author's censure, with which we are at present concerned.

Is it so much as true in fact that he has said any such thing as is affirmed in the objection? This perhaps even a sceptic will contend fairly with me; for facts are the things they are observed to be most

fond of. Well, let this be tried (as it ought to be) by his own words.

There are two, and as I remember but two, passages in this chapter which speak at all to this purpose. One is page 188, the other 205. In the first of these I immediately find these words. "Much less would I be suspected of indulging a sceptical humour, under colour of philosophical doubting, to such an extravagance as to make any serious question of that general and collective object of sense a natural world:" the other is this; "But as to the existence of bodies, though it be a thing of no reasonable doubt, nor to be seriously questioned by any sober understanding," &c.

Here the thing that is not to be doubted of, (at the hazard of the sobriety of our understanding, and upon peril of scepticism,) is the existence of bodies, the existence of a natural world, which is supposed to be the object of sense. Well, and what is this to me? Have I been doubting of the *existence* of *bodies?* Or of the natural or *sensible* world? Let the meanest of my readers be my witness, that I have been so far from doubting of any thing of this, that I have even contended on all occasions that nothing is, or can be, more evident than the *existence* of bodies, or of a *sensible* world. Have I repeated the same thing some hundreds of times, and yet still is there need to have it observed, than an *external* world is the moot point between us? That, not the *existence,* but the *extra-existence* of the sensible world, is the point I have been arguing against? And that, not a natural, *supposed* to be a *sensible,* world, but an *external* world, *as such,* is impossible? But there is not a word of an *external* world in the two sentences before-mentioned; and therefore nothing in the least against the conclusion which I am concerned for.

True, you will say, but this was only a mistake

in the manner of expressing it; for that the whole drift and argument of this chapter supposes the subject to be an external world. I answer,

Right; that is the thing I have been all this while expecting, viz. a little of his argument in the place of his authority; and you see this we must come to before there can be any decision.

But alas! to what purpose? For I find these words in the very title of his chapter, viz. *That the existence of the intelligible is more certain than that of the natural and sensible world.* This destroys, and doubly destroys, all again. For, first, here he speaks not of an *external*, but *sensible*, world; and of this, not of its external existence, which is the point I have been arguing against; but simply of its existence, which is the point I have been arguing for. And yet,

Secondly, His end proposed is not to aggravate, but lessen, its certainty: and this is the drift and argument of the whole chapter, at least of about thirty pages of it; the rest being employed in a digression concerning the comparative certainty of faith and reason.

But is this the main design and purpose of this chapter, to lessen the evidence of an external world? To shew, (as he plainly does, and for which I refer my reader, to shew, I say) that neither reason, nor sense, nor revelation, is sufficient to assure us of the existence of any such thing: nay, that the argument used by Des Cartes, before mentioned, in which he places his last resort, falls short, and is deficient, for which we have his own express words in the 208th page? And can that same author say, in the midst of all this, that the existence of an external world *is a thing of no reasonable doubt, nor to be seriously questioned by any sober understanding*, &c. surely it could be no mistake that he omitted the word external, unless he designed to

question his own understanding, and formally pronounce himself a sceptic.

Well, you will say, but it is matter of fact that he has argued against something. I answer, he has so, for it is evident to demonstration that he has argued against himself; and not only so, but also as sceptically as is possible.

For after all nothing is more evident, than that his censure and arguments proceed upon the very same subject; and that is, not the *external* existence, but the existence *simple* of the natural world. This natural world is sometimes by him called *bodies*, sometimes the *visible* or *sensible* world: being about to aggrandize the evidence, or objective certainty, as to us, of his intelligible or ideal world, he endeavours to shew, that it is much more certain to us than the *existence* of the natural, or *sensible*, world; and that because we have,

1. More,
2. Better, reasons to assure us of its existence.

These are his very words, as may be seen in the 188th page, even in that very page in which is found the censure on all those who so much as offer to question the existence of the natural world. But now the fact is, that he does question its existence both here, and throughout the whole course of this chapter. What can be more evidently inconsistent, more evidently sceptical, than this manner of proceeding? What! Doubt of the existence of bodies, sensible bodies? Well may this be called indulging a sceptical humour under the colour of philosophical doubting. And is this so called too by the very person who does it? This is not only to be guilty of scepticism himself, but also to be self-condemned.

The sum of this whole matter is this: if, by the existence of the sensible world, Mr. Norris, in this censure, is said to mean not the existence simple, but the extra-existence of it, his arguments directly con-

tradict his censure, which is a full answer to his authority in this matter. If on the other hand he be said to mean as he himself speaks, this is, first of all, nothing at all to me, who doubt not of the existence, but only of the *extra-existence*, of the *sensible* world: then, secondly, he is in this as much contrary to himself, as on the other supposition, in that he formally doubts of, and even argues against, that which he calls it scepticism to doubt of. And, thirdly, which is as bad as any of the rest, he doubts formally of a point which is not capable of being doubted of, viz. *the simple existence of the visible world.* To all which, lastly, I may, and also must, add this, that this second supposition is something more than an *if*, it being evidently the case in fact, that his whole discourse in this place is only of the existence simple of the sensible or visible world; and not a word of its *extra-existence*, on the *concession* of its *existence simple*, is so much as mentioned or implied.

I doubt not but on sight of the title page many of my readers will judge, and be ready to say, surely the whole world is full of arguments against so strange an assertion, as that there is no external world. And perhaps, in this place, some may wonder that I end here with the mention of so few objections: but let such as these try to add to their number; they may possibly find it more difficult than they imagine.

In the mean time I expect to be understood by some, when I ask their pardon for the trouble I have given them, in thus seriously considering so many trifling objections: objections which for the most part have been lame on both their legs, the language of prejudice only, and having scarce so much as an appearance to introduce them. But indeed I thought I could do no less, considering the dispositions of far the greatest part of those

whom I have conversed with; who will be so far from blaming me on this account, that they will be ready, even at this time, to take part with these objections. Even such as these I would please, if possible; but being too sure of the event, I have nothing left to do, but to acquit myself, by cutting off all occasion of offence which might be taken at my leaving unmentioned, or unanswered, any objection which I have heard, or found, or which may reasonably be judged I ought to have found: And in this respect I profess I have done my best, which, I think, is all that can be expected of me.

THE CONCLUSION OF THE WHOLE.

Of the use and consequences of the foregoing treatise.

HAVING demonstrated, as I think, my point prefixed in the title page, viz. the utter impossibility of an external world; and supposing also that this is here granted me by my reader; he has a right to demand, of what use and consequence is all this to men, or to the moral world.

Now in order to return as plain and distinct an answer as I can, and as can well be expected from me in this place, to this question, I would chuse to split it into two, making the words *use* and *consequence* to stand for two different things: and I shall begin with the last, viz. the consequences of this po-

sition, *no external world.* To the question concerning which I have these two things to answer.

First, I know not why my reader should not take my word, (I mean till he himself has made inquiry,) when I assure him that the consequences of this position are exceeding many in number. If this will pass, I again assure him, that I have found by more than a ten years experience, or application of it to divers purposes, that this is one of the most fruitful principles that I have ever met with, even of general and universal influence in the field of knowledge: so that, if it be true, as is here supposed, it will open the way to ten thousand other truths, and also discover as many things to be errors, which have hitherto passed for true. But this,

Secondly, may in some measure appear to my attentive reader, even before he has made inquiry, and though he makes some scruple of believing me on my word: for he cannot but have taken notice, that all language not only supposes, but is almost wholly built on the supposition of, an external world. With this is leavened all our common discourse, and almost every thing that is found in the writings of philosophers: so that with half an eye it must needs be seen, that were a man to call all his former thoughts and opinions, all he has read in books, or heard in conversation, to an examination or review, in the light of this position, he would find a mighty work upon his hands, in correcting only former errors, setting aside the positive part of deducing truths in their room.

This, I think, is all that can be said in general, in answer to the question concerning the consequences of this position: and I believe my reasons will be judged to be sufficient for not entering into the particular deduction of these consequences: as first, that this would be all over digression in this place: and secondly, such a digression as would swell the

volume to more than ten times its present size: but chiefly, thirdly, for that I know myself to be unqualified for so great a work, which is no less than the compiling a new system, at least of general knowledge. Perhaps the little which I have here supplied may move some more comprehensive genius to begin where I conclude, and build something very considerable on the foundation which is here laid. But I must be allowed to be a proper judge even in my own case, when I profess that I am far from being equal to so vast an undertaking. However, secondly, I will add a word or two concerning the use of the foregoing treatise: by this, as distinct from the former head, I would be understood to mean,

1. The subject matters with regard to which it may be of use.
2. Its particular usefulness with regard to religion.
3. The proper manner after which it should be used.
4th and lastly, the particular use and advantage which I myself propose by it.

First, as to the subject matter, it may possibly be asked, whether every thing must pass for false which does not square with this hypothesis, supposing it to be true? Or, whether because it is true, that there is no external world, we must therefore use this language in discourse, or writing on *every kind* of subject? To this I answer,

1. That I have in good measure prevented this inquiry in my second answer to the second objection, Part II. where I have shewn that we are at liberty, and also in some measure, obliged to use the common language of the world, notwithstanding that it proceeds almost wholly on the supposition of an external world: for, first, language is a creature

of God, and therefore good, viz. for use, notwithstanding this *essential* vanity which belongs to it. By this God spake the world into being when he said, Let there be light, let there be a firmament, a sun, moon, and stars, &c. and they were: all these things were made in the *beginning*, even in the *word*, and *wisdom*, and *will* of God; and therefore *in him* they are *true*, even *externally* true, according to the language by which they were willed into being, though in *themselves* they carry an *impossibility* of so existing. But this does not justify the goodness of this language with regard to us; or rather, justify us sinners in the use of this language, without reflecting, secondly, that we are redeemed or recreated by the same Word of God, who has taken on himself the iniquity of all things; who, as one of us, has used this common language, and even bore it with him on his cross; who, by his Spirit in his apostles, has spoken all the languages of the world, making thereby every tongue his own, and who, lastly, in a word, has pronounced every thing to be clean to those who believe. I answer therefore,

2. That there are certain subjects which require the use of this common language; and on which, to speak in the language of this hypothesis, would be both ridiculous and unjust; unjust to the will, and to the word, of God, who has made and sanctified common language to our use, and consequently to the obligation of our christian liberty; and ridiculous, in that on several subjects of discourse the use of any other than the common ways of expression would be altogether vain, nonsensical and absurd. I might easily give a thousand instances of the truth of this; but it were pity to prevent the many witlings of the present age, who by this would lose their whole field of knowledge, with relation to this subject, and would have nothing left

whereby to ridicule what they are incapable of understanding. I leave it therefore, to pamphleteers, doggrel rhimers, and comedians, to expose the language of this treatise, by applying it to improper subjects: for since the only end of this kind of wit is not so much as pretended to be truth, but only laughter and diversion, I am content to be the subject, and also to laugh for company, as having no pretence to the moving of one smile by any thing I have here said. Allowing therefore all due advantage to little wits of all sorts and sizes, I answer,

3. Thirdly, that whenever we are, or pretend to be, serious, I would recommend the language of this discourse to be used only on subjects the most general, simple, or universal, I do not say, in philosophy only in general, or in this or that particular branch of it; for I profess to understand but very little of either, as words and ideas have been usually linked together. I say therefore only, as before, the most simple, general or universal subjects; subjects wherein the question is strictly about truth, particularly such wherein the question supposed receives any alteration from the supposition or denial of an external world.

Well, you will say, but then it seems it has but little to do with religion, which is a subject best understood or treated of in the common ways of speaking: by this I am led in the

Second place, to consider the particular usefulness of this position or hypothesis with regard to religion. Accordingly I make answer;

First, It has been often my fortune, and may be again, to have this question put to me by such as have not been able to comprehend the reasons by which I justify my point of no external world; which, by a very natural progress, has given them a mighty zeal against the conclusion. In this case,

their only refuge to avoid an utter silence, has been to urge this question about its usefulness as to religion. The pretence of this is, that religion is their only care, or the end of all their inquiries; so that if it does not immediately appear that this hypothesis tends to the promotion of religion, they are fairly excused from believing, or so much as attending to it.

But now to such as these, surely nothing can be easier than to return a sufficient answer. But I think the best, in this case, is to make none at all. For first, it is evident that the end or drift of this question is not to urge any thing against the truth of my conclusion, but only to excuse its authors from so much as inquiring into it. But this certainly is a point I can never be supposed to contend against, whilst I am suffered to live out of bedlam. And therefore since this is all that is demanded by this question, it must needs be very impertinent to go about to answer it any otherwise than by saying, Sir, you have free leave to think of what subjects you please; especially having chosen the better part already, viz. religion, and nothing else, to employ your meditations on, &c. But, secondly, it happens well enough for the ends of my discourse at present, that my reader is here supposed to have inquired already into the truth of my conclusion, and also to have discovered it to be true.

And this gives the question concerning its usefulness as to religion, a very different turn and sense from what it had before. For now though it may be the effect of curiosity only, yet it very probably may be the effect of a serious desire of farther knowledge, and of a true regard for religion, and therefore ought to be so reputed. Whereas the same, as before proceeding, is even designed as a bar to knowledge, and is plainly no other than a

religious disguise. But whatever be the true cause or principle of this last, I must needs acknowledge its right to an answer. Accordingly I affirm,

Secondly, that I consider the present treatise, as a matter of no little use, or good consequence, with regard to religion; that I have found the truth of this by a long or very considerable experience; and in a word, that (be it taken how it will by certain vain pretenders) I will be bold to pretend, even in my own behalf, such a real, and even exclusive, regard for religion, that I would never have troubled an unwilling world with this discourse, (notwithstanding the infinite use which I conceive it to be of with respect to simple or universal truth,) had it not been for its particular usefulness with respect to religion; and consequently for the benefit of those few who I expect will find the truth of what I here affirm.

I am sensible this will pass for very slender authority with some, and perhaps too for an objection with others; unless for their satisfaction I produce the points concerning which I affirm this discourse to be of use. But I have proved my point already, viz. all that is in my title page, and I shall prove no more, till I am aware of the success of this, or hear from my reader himself, what farther demands he may have upon me. Nevertheless, that I may avoid the imputation of having passed over but the name of an objection, without an answer, I will go out of the track of my intended method so far, as to charge myself with the debt of one instance of this sort; and that is, the point of the *real presence* of Christ's body in the eucharist, on which the papists have grafted the doctrine of transubstantiation.

Now nothing, I think, can be more evident, than that both the sound and explication of this important doctrine are founded altogether on the supposition of external matter; so that if this be removed,

there is not any thing left, whereon to build so much as the appearance of a question.

For if after this it be inquired whether the substance of the bread in this sacrament be not changed into the substance of the body of Christ, the accidents or sensible appearances remaining as before; or suppose this should be affirmed to be the fact, or at least possible, it may indeed be shewn to be untrue or impossible, on the supposition of an external world, from certain consequential absurdities which attend it; but to remove an external world, is to prick it in its *punctum saliens*, or quench its very vital flame. For if there is no external matter, the very distinction is lost between the substance and accidents, or sensible species of bodies, and these last will become the sole essence of material objects. So that if these are supposed to remain as before, there is no possible room for the supposal of any change, in that the thing supposed to be changed is here shewn to be nothing at all.

I have chosen to instance in this, rather than any other point of divinity or religion, because this of transubstantiation is one of the most important doctrines of the Roman church; which church at the same time happens to hold the insufficiency of the scriptures. Now as these two opinions happen to concur in the same persons, it may possibly prove an umbrage to certain weak and tender spirits, as if my affirming only without proof, that the present treatise, is of such mighty use, with regard to religion, were an intrenchment on the sufficiency of the gospel revelation, and consequently an approach towards the error of popery. This is the objection hinted at before, viz. the great and mighty objection, for the sake of which I have departed from my method, and broken my resolution. But it is high time however now to return and proceed.

The third thing which I proposed to speak to, is the proper manner after which I would desire this treatise to be made use of. And here

Let the first thing be, to read it thoroughly and attentively. It is not so long but it may be read more than once without any very considerable expence of time. However, let it so be read as to be perfectly understood to be either true or false. If false, I would desire my reader to give me notice of the discovery, that I may discharge myself of the guilt of having published a falshood in so confident a manner; and also such a falshood as bids open defiance to so considerable a part of whatsoever men have hitherto pretended to know. This I think is a fair request. But my reader is here supposed to understand it in another light, or to look upon it to be true.

If so, I must nevertheless desire him to employ all his skill or attention for some time to make it as familiar as possible to his understanding. If he fails in this he will find his assent slide from him he knows not how; and he will come in a little time to an effectual disbelief of it, whilst he continues to believe it. This is the manner of men, with respect to truths, either very simple, or peculiarly religious; there lying an equal prejudice or opposition of sense against both these kinds of truths. This, by the way, is some sort of argument that there is a nearer affinity between these two kinds of truth than is commonly imagined; but I am content in this place to suppose them very different. And be they as different as they will, yet sure I am, that the subject of this treatise is of the number of those which make the least impression, even after they are assented to; or against which the strongest prejudices are found to lie. For nothing can be more evident to the first or natural apprehensions of men, than that even the sensible or visible world is external.

And I believe I shall find enough of this from my experience with other persons, to make it needless to attest the truth of it upon my own. If so, and if it be true notwithstanding that there is no external world, I must again desire my reader to use his utmost diligence and attention to render this truth as sensible to himself as possible; which he will find to be done only by a very frequent meditation on, or exercise of himself in it. And here, (if I may for decency sake be allowed to press this matter any farther,) I would advise him,

First, to exercise himself for a little time in writing on, or rather against, it. Let him try to add to the objections which I have already considered, or respond afresh to the answers which I have given to them; and perhaps his surprise to find the little effect of this experiment, may add some grains to the firmness of his assent.

After this it would confirm him not a little to make the same experiment in discourse with others, whether learned or unlearned matters not much, if I have rightly observed; unless it be that the learned in this case, usually make the least pertinent objections. This method will in some measure engage even self love on the side of truth, which will mightily help to overbear the force of common prejudice against it.

But lastly, if after all this endeavour he yet find it difficult (as I believe he certainly will) to keep the edge of his attention fixed, so as not to think it still more evident that the visible world is, than that it is not external, let him practise with himself an easy, but a very useful, art, which is to use himself to meditate on this subject with either his eye or imagination fixed on a looking-glass. This, he may remember, was one of the instances given (Part 1. Chap. 1. Sect. 1.) to shew, that the *seeming* externeity of a visible object is no argument of its *real*

externeity: and it has since appeared that all visible objects are equally external; or that that which is usually called the visible world, is indeed no more external than what is usually called the reflection or image of it in a looking glass. Nevertheless it is much easier to apprehend or believe this, with respect to objects seen in a glass, than to such as are seen out of a glass; and it is only my reader's ease that I am at this time consulting.

Now by these and such like means, I suppose, even my Aristotelian reader (who by his studies has been long unqualified to receive or apprehend pure *unbodied* truths) will become master of this subject, as simple as it is, or understand it with the same, or some degree of the same, ease or feeling, wherewith he usually understands ideas that are more complex. And if so, he is prepared for all the ends and uses of it. The chief of which is this,

Secondly, to carry it about with him, and use it as one would do a key, or mirror, or almost any other kind of mechanical or useful instrument. To carry, I say, not the body of the present treatise, or so much as one argument of it, in his memory, but only the conclusion, viz. *no external world*, which is just what is in the inscription or title page.

With this, as with a key, he will find an easy solution of almost all the general questions which he has been used to account very difficult, or perhaps indissoluble.

And as a mirror, held, as it were, in his hand before the writings of others, it will discover to him many errors, where before he little expected to find them; besides that it will open to him a new scene of truths, which have not hitherto been so much as inquired after.

In a word, let him read and think with this one proposition always present in his mind, and I am persuaded he will need no assistance of mine to make

it appear to him, that it is of the greatest use and consequence in the inquiry after truth.

And now I have nothing to add, but a word or two concerning the particular *use* or *advantage*, which I myself propose from having written this discourse. And that is,

First, the probability by this means, of having the truth of it thoroughly examined: which is rarely done to any purpose in discourse, and indeed in any private way; besides that, I would consult the common benefit as well as my own.

Secondly, and lastly, that by this means I have freed myself from many difficulties; in case I should live to appear in public on any subject, which is either a consequence of this, or any way depends on, or interferes with it. I speak this from an experience very often repeated. And this, at last, has reduced me to this necessity, either never to attempt to write on any but the most ordinary and popular subjects, (which is a work I have too good reason to leave to others,) or resolve in the first place to set heartily about this, and establish it once for all; as I hope I have here done.

If so, I have no more to do for the time to come, but only to refer to what I have here written and published: which is a liberty I may possibly reap the advantage of in discourse on some other subject; but which I shall be sure to use, and make the most of, in case this should be replied to by any partial, unfair, or scoffing adversary.

THE END.

[ii.]

A SPECIMEN OF *True Philosophy*; IN A DISCOURSE ON GENESIS,

THE FIRST CHAPTER AND THE FIRST VERSE.

By ARTH. COLLIER,

RECTOR OF LANGFORD MAGNA, NEAR SARUM, WILTS.

Not improper to be bound up with his

CLAVIS UNIVERSALIS.

1 Tim. vi. 20.

O Timothy, Keep that which is committed to thy Trust, Avoiding profane and vain Babblings, and Oppositions of Science, falsely so called.

SARUM,

Printed by Charles Hooton, and Sold by E. Easton, in Silver-street; Mrs. Fletcher, in Oxford; and J. Knapton, in St. Paul's Church-Yard, London. 1730.

[Price Six-pence.]

ADVERTISEMENT.

I CANNOT send this imperfect essay into the world, without acquainting my reader, both why it is so imperfect; and why I send it abroad as it is.

And first it is, as he will find it; because it is only designed as an introduction to a much larger work, which I reserve as the great employment of my life; and, which probably will not see the light till after my decease, viz. a body of christian knowledge or theology, consisting of observations, notes, paraphrases, and explications of all the most considerable passages in the word of God. And also, because as little as it is, considered as an introduction to the great mystery of godliness; yet considered as a subject distinct by itself, it is no less than a whole system or compendium of general knowledge or philosophy: and I suppose, I need not tell my reader, the particular reason, why he is not to expect from my management, any more than an imperfect essay, towards so great a work.

But why, you will say, should I send it abroad before the body which it belongs to? Why, I answer, because of every thing before mentioned.

As first, because I have done my best; and if I stay ever so long, I do not think I can mend it.

Secondly, because it is an introduction to a work, which I take to be of the highest importance to be well considered; and therefore I am inclined to hope, that this short discourse, by resting a while, and even dying, in the reader's mind, may more effectually prepare the way for the reception of what is designed to follow, than if it only stood as a little part of the whole.

And lastly, because it is indeed a subject by itself, as I hinted before; and therefore, hating my imperfect management of it, may as properly appear, as a noun-substantive by itself, as any other system of reason or philosophy.

If these are not reasons enough to content my reader, he may further be pleased to know, that I have a great many more; though these are all that I shall mention, before I know for certain, how he and I shall agree, with regard to the truth *of this little specimen.*

GENESIS

GENESIS, Chap. i. Ver. 1.

Ἐν Ἀρχῇ ἐποίησεν Ὁ Θεὸς τὸν οὐρανὸν καὶ τὴν γῆν.

In the beginning God created the Heaven and the Earth.

IN *the beginning*—What is this *beginning?* Is it only a word of a common meaning; and as if it had been said, that when God *began* to make or create the world, He *began* to create the world? or that he began *before* he made an end of his work? This seems to be but poor and bald. But does it not rather signify the very contrary to this? Namely, that God did *not* begin before he made an end; but rather that he ended, in the act or instant of his beginning? This is something nobler than the former, and may, for aught I know, be the very truth of the fact, with regard to that work of God which is properly called *creation*, or production from nothing; at least it may be true in a certain tolerable sense, but which I need not here be careful to distinguish. But, whatever be the truth of this proposition, that God made all things in an instant, it does not seem to be the truth delivered to us in the text, nor indeed to be any meaning which the words will naturally bear. Nevertheless, if another person has any fondness for this sense of the words, I am content to admit it as a remote, and distant, and consequential meaning of them, provided he otherwise makes it good, or proves it to be true, from plain reason or scripture.

But some there are, perhaps, who understand no more by this phrase, *in the beginning*, than a word of course, a common *imprimis*, at the beginning of a narration. Well; let those who can sit down with this, be contented to know no more. For my part, I have otherwise used myself to read and understand the word of God. And here, not to hold my reader in suspense, I will tell him by what rule I intend to proceed in the following pages.

Being told by St. Peter*, that the words of scripture are not of any single or private, or peculiar interpretation, I have formed to myself this general rule or method of understanding them; namely, to take as much into the compass of every passage therein contained, as the words will fairly bear, or is consistent with, and not contradictory to other parts of the same.

And now methinks, these plain and simple words of Moses, are like the flaming sword, which turneth every way; or like some wonderful mirror, which in every new point of view, exhibits a new world: that is, without a metaphor, they seem to contain a summary of the whole object of science, both divine and human, theological and philosophical.

In the first of these respects, it may be called the summary of the Bible. And here I make no doubt, but this is that very passage, which is pointed at or referred to, by the Psalmist †, and after him by the apostle to the Hebrews ‡, under the character of Κεφαλὶς Βιβλίου; which, though translated the *volume*, is indeed properly the *capitulary*, sum or substance of the volume which we call the Bible. And, where can we so probably seek or expect to find such a summary of the whole, as in the first or initial words of it? It being the usual method of the best writers to begin their work with some general or universal proposition, which contains or implies the whole of

* 2 Pet. i. 20. † Psal. xl. 7. ‡ Heb. x. 7.

what follows, and may be called the text or key-note to the whole composition.

Now it is said in the afore-cited text of the psalmist, as applied by the apostle, that this Κεφαλὶς Βιβλίε is written of the Son of God. And we christians especially cannot well be ignorant, that his mediatorial office between God and his rational creatures, is the great subject or substance of the book of God.

Here then, let us look attentively, and we need not doubt but we shall find Him spoken of. The words, once more, are these; Ἐν Ἀρχῇ ἐποίησεν Ὁ Θεὸς τὸν οὐρανὸν καὶ τὴν γῆν. In Latin thus, *In principio creavit Deus.*—And lastly in English (unless we will be content with a mere *imprimis*) thus, "God made the heaven and the earth *in something*," for which we want a name; that is, in, and by, and through some other being, or person, different both from God the maker, and the things spoken of to have been made. And what, or who, can this third, or middle being, or person be, but the being we are in quest of, viz. *the only begotten Son of God?* In and by whom, we are so frequently told in scripture, that God the Father created all things; and who is so often distinguished by the word Ἀρχὴ, and even Ἀρχὴ τῆς Κτίσεως τῆ Θεῶ*, as by his proper name and character? See particularly, Deut. xxxiii. 27. LXX†. Here then we have both the Father and the Son; which by the Son himself is made the summary of the whole bible, saying, *this is eternal life, to know thee the only true God, and Jesus Christ whom thou hast sent*‡. The Father, who is the first or principal; the Son, as the secondary or immediate cause, or creator of all things.

But now, whereas the language of scripture generally runs thus, that God, even the Father, created all things by or through his Son; we are told by Moses, in the words we are now upon, that God

* Col. i. 16, 18. † Rev. iii. 14. ‡ John xvii. 3.

made all things *in* his Son; which particle *in*, though it very frequently stands for *by* or *through*, yet we all know, has a peculiar and primary signification of its own. And this therefore I take to be the primary sense of these words of Moses; as if he had said in words at length, that God did not only make or create all things *by* or *through* his Son, as being his immediate agent, but also that they were made, that is, that they now exist *in* him, as in their more immediate support or substance. For, as we are told by the Psalmist, that in *wisdom* he made them all, which wisdom of God is generally understood to be the Son of God, who is also frequently elsewhere called by *this*, as by his proper name; so, we are told by St. Paul, that he is *before all things, and in him all things consist* *, or have their being. And, therefore, he being the immediate maker or creator of all things, we may justly apply to him the words spoken by St. Paul, concerning God indefinitely, viz. that *in him we live, and move, and have our being* †. And the reason is the same for both. For if we exist in God, because we are made by him, we must believe that we exist more immediately in the Son, being told, as in the text, that God made us and all things, *by* and *in* his son.

Here then we find these words of Moses, to be not only an abstract of the Bible, or of what is called theological knowledge, but is also a summary of pure reason, or philosophy. For he that is the Ἀρχὴ τῆς Κτίσεως, the *Archè* of the whole creation, must needs, in some proper sense, be the subject or object of all that is called science. For, as from God's creating all things Ἐν Ἀρχῇ, or in his Son, we have seen it necessary to infer, that all things exist in him; so here, it is evident at first view, that, if all things exist in him, then the true way of contem-

* Col. i. 16, 17. Also Heb. i. 3. "That he upholdeth all things."
† Acts xvii. 28.

plating or considering the being of all things, must be to consider them as existing in the Son.

But every thing in its own order. For though the heaven and the earth, and all things therein contained, do actually exist in him; yet they are not all to be considered, as every one existing *immediately* in him; or, as we may say, all at the same distance from him; but, at several distances or projections from him, according, or in proportion, to their several kinds, essential differences, or perfections. For, though we willingly receive it as the principal meaning of the words, that he made all things in his Son; yet, as we may otherwise learn, both from reason and sense, that some things exist in others, we see no reason why we may not take the benefit of the grammatical form of speaking, observable in the words themselves; where it is not said, Ἐν τῇ Ἀρχῇ, or in the *archè*, but simply Ἐν Ἀρχῇ without the particle τῇ, as if it had been translated, God made heaven and earth in *an* archè. And so, the whole sense of it may be thus expressed. God made the world in *general* in *the archè* his Son; and every thing in *particular*, each in its own proper, or immediate *archè*.

So that, as on one hand, we may observe (as in analogy to the apostle's words *,) that, though there are many persons and things, both in heaven and earth, which are called *archai* or *substances;* yet they all terminate and exist in one, viz. the Son of God, who is the Ἀρχὴ τῆς κτίσεως, or substance of the whole creation; so, on the other hand, it may be said with truth, but in a secondary sense, that though all things in general exist in one common substance; yet, there are many substances, both in heaven and earth, which, with respect one to the other, may not improperly be called by this sacred name.

Here then we have but one, and yet many substances, which, how mystically soever it may sound

* 1 Cor. viii. 5.

to those, who have never considered the text in this light, or thought at all in this way; yet, that there is such a way of speaking, or, that it is not really a contradiction, I should think I might appeal to the common notions of all, especially of all those who have ever conversed in what is called philosophy. For, what is more familiarly known amongst men, than the doctrine and distinction of substance and accident? Or, what is more obvious to common observation, than that what is an accident to one substance, may be a substance to another accident? And, what so proper language in this case, as to say, that, how far so ever this projection of substances may be carried, yet still there is but one substance, viz. the first?

For instance. Suppose a piece of matter, called canvas, with the picture of a man upon it. What is this man but an accident of this colour? And, what is this colour, but an accident of this canvas? The colour then is the substance of the accident-man, and the canvas is the substance of the accident-colour; and where now is the mystery of saying in this case, that there is but one substance, viz. the canvas.

Now this, I say, is a very near resemblance of the relation of inexistence, which all creatures, both in heaven and earth, bear in their several orders, to one another, and all to the first Being or substance, which in the text is called, or supposed to be, the Son of God.

But this is an instance of but one sort of accidents, which may be called inherent or fixed. There are others that are moveable, and, for want of a better name, may be called adhering accidents; whose manner of existence, seems to me to be something more expressive of the point which I would here explain. Now under this distinction I shall mention two several instances; which, though in-

deed very different from each other, in some respects; yet agree well enough in the genus I have placed them under, namely of adherent or moveable-accidents.

The first of these shall be the object or image, which is seen upon a piece of paper, in a camera obscura, which is too well known in the learned world to need a more particular description.

On this paper, we are supposed to see an exact similitude of several objects, which are called external; that is, of every object without the camera, which lies in a right line, and at certain distances from the glass, through which the light is admitted. In a word, we see a green field or meadow, in which there grazeth a cow; on the back of which cow (as is usual at a certain season of the year) there stands or walks, a bird called a jack-daw.

Now here again, are several substances, and yet but one substance; viz. the paper: with regard to which the others are no more than accidents, as all existing in or on, the said paper.

But yet, every one in its own order. First the paper; secondly the green field; thirdly the cow; fourthly the bird: that is, the bird on the cow, the cow on the field, and the field (together with the whole scene) on the paper.

But the truth of the matter is; there is more in this, as indeed in every instance of this kind, than what properly belongs to the distinction I am here upon. That is, we have here an instance of both kinds of accidents in one view, as well the fixed as the moveable. And therefore, I would beg leave to reconsider them both together.

In this view then, instead of three, we have more than double that number of accidents to take notice of; which all exist in, (that is, in or on) the one common substance, viz. the paper; but yet not all immediately, but at several distances, or pro-

jections, one in another; till we come to the last, which, in this account, must pass for a pure or simple accident. As first, the colour or whiteness of the paper; secondly, the field; thirdly, the colour of the field; fourthly, the cow; fifthly, the colour of the cow; sixthly, the bird; seventhly, the colour of the bird.

And here likewise we have just the same number of substances; only with this difference, that the paper, as being the common substance of all the others, has a right to be called the one substance of the whole; or, as I may say, to boast itself against the others, calling them by the name of accidents. For, as the whiteness is an accident of inhesion of the paper, it is the proper or immediate substance of the field, &c. till we come to the last, viz. the colour of the bird, which being necessarily an accident, must as necessarily be considered as a pure or simple accident; otherwise it would be a contradiction in terms to call it the last in order.

My other instance of a like kind with the former, is that of an object appearing in a looking-glass: wherein we see a whole visible world, with all its motions, distances, proportions, &c. so exactly like the world which we usually call external, that some ingenious persons have contended it to be the same. But, as such as these are too ingenious and subtle for me to take hold of, I must desire their excuse if I turn from them to those, who are willing to grant what these deny; namely, that one and one make two, and not one; that things different are not the same; that east is not west, nor the right hand the left, &c. From all, or either of which principles it follows, that the objects seen, as in the glass, are not the same with those which are called external; for which also I refer my reader, to a little book of mine, intitled Clavis Universalis, page 17. And now my instance is this,

In the glass I behold an expanded, or an outstretched space. In this space, I see a bright circular spot or figure, which we call the image of the moon, or, if I may have leave to coin a word, an imagic or iconic moon. Now here I perceive four several things, the glass; the expansum or space; the body or matter of what we call the moon; and lastly, the colour of the said moon: and these, considered logically, that is, Ἐν Ἀρχῇ, will stand in this order; the colour as existing in the moon, the moon in the expansum, and the expansum in the glass.

In this likewise, may be seen the paper beforementioned, in the camera obscura; which paper must now be no longer considered as the first, or one common substance of the rest, but only as one intermediate link of the chain; that is, as existing *in* the space or expansion; which expansion exists *immediately in* the glass. In this view then, the glass is now become the staple on which the whole chain depends; or, the one common substance of nine several accidents, eight of which are as properly substances to other accidents in their order, as the first is to them all.

I am very sensible, that to much the greater part of my readers, I shall here seem to talk the most egregious nonsense that ever blotted a poor innocent piece of paper. But, as I cannot be more sure than I am, that they will not be able to prove it; so, after using my whole endeavour to be as plain in words as I can (for which I dare appeal even to themselves) I can add no more to them, than that I am extremely sorry, that I can no otherwise help their want of understanding.

Now, the drift of all this is to prepare my intelligent reader, not to lift his foot too high in taking the two following steps, (for this, we all know,

is as sure a means of falling, as not lifting it high enough;) for now, there are but two degrees more, before we come to the Ἀρχὴ Ἀρχῶν, the beginning of beginnings, the common center or substance of the universe. But in truth, how intelligent soever I would willingly suppose my reader in this place; yet I cannot proceed with a quiet mind, till I have told him, that unless he has perused, and seen the evidence of the little book before-mentioned (which, except a single passage or two in Dr. Berkeley's three dialogues, printed in the same year with the other, is the only book on that subject, which I ever heard of in the world,) it will be as much in vain for him to go with me any farther in this discourse, as if he was one of those, whom I took my leave of in the former paragraph. For I am here to proceed on the supposition of the truth of what I have there both demonstrated and explained. He therefore that hath ears to hear, let him hear, as followeth.

In my first instance of the camera obscura, I considered the paper as the common or first substance of all things contained in, depicted on, or existing in it. But in the last instance of the looking glass, the paper itself (i. e. that visible object in the glass called paper) is now become an accident, or second substance, that is, a secondary or dependent substance, namely, on the glass, in which it is seen; just after the same manner, as the green field is seen to exist in the paper, or the iconic moon in the glass. Indeed I before considered both the paper and the moon as existing primarily, or immediately in the space or expansion, which I did in order to extend the chain or projection to its utmost length; but here there is no need of being so very particular.

Let the glass then stand as the substance of the iconic moon, and consequently of the whole visible

iconic world, contained or existing in it. That which I would advance is this;

That, as the visible iconic world exists in the glass; the glass itself exists in the mind or soul of him that perceives it. And therefore, as the visible object, which we call the glass, is of the same nature, or world, or order, with all the bodies of the universe, we must affirm the same of all indifferently; which is the same as to say, that the whole visible world exists in mind, or in the soul of him that perceives it.

Now, this is the very point which, I think, I have demonstrated in the little book before referred to; where besides, I have proved at large, by nine several arguments, that an external world, or matter not dependent, for its existence, on mind, is an impossibility and contradiction.

Well then; in the text we are told, that God made heaven and earth, or the whole material world Ἐν Ἀρχῇ. This may be called the major, or universal proposition, of the argument I am upon: and for as much as it is the word of God, it may well pass, with us christians, for an unquestionable axiom. Now, to this I subjoin the proposition, by me demonstrated, as the minor; namely, that the visible or material world exists in mind, i. e. immediately in the mind of him that seeth or perceiveth it; wherefore I conclude the meaning of the text to be the same, as if Moses had said, *In mente creavit DEUS*, &c. i. e. that mind, soul, or spirit, is the Ἀρχὴ, *in* which God created the heaven and the earth.

But here, we must again remind ourselves, of the distinction, of *mediate* and *immediate*, *first* and *second* substance, or the like, which I have all along proceeded on. For, it is supposed here, in the first place, that the Ἀρχὴ here spoken of in the text, is primarily or principally to be understood, of the

Son of God; who, though He is but the μεσίτης, or middle being between God (i. e. *pure* God) and man, yet is said to uphold all things*, and is here given us as the Ἀρχὴ of the whole creation.

When therefore I here affirm, on the foundation of what I have elsewhere proved, that the visible or material world, which I (for instance) see, exists *in me*, or in my particular mind; I mean only to say, that my mind is the *immediate* Ἀρχὴ or substance, of the object perceived; or that the visible world, which I see, exists *immediately* in my particular mind or soul. And, therefore, whereas it is said in the text, that the heaven and the earth, or the said visible world exists in the Son of God, the meaning can be no other than this, that the said visible world exists *mediately* or *ultimately*, in the same divine person; which is the same again, as if it had been said, that, as the visible world exists *immediately* in any human or created mind; so the said mind itself exists *immediately* in the Son of God. For, this is now the only possible meaning, which can remain of this saying, that *God created the world in his Son* †. And to this agree the words of the apostle, who assures us, that there is one, or but one μεσίτης, or intermediate being, between God and man, who is the man Christ Jesus.

Here then, we have a true picture given us of all creaturely existence; that, it is not existence simple, but only inexistence. So that, if Moses had only said, that God created the heaven and the earth, or meant no more by Ἐν Ἀρχῇ, than we commonly mean by *imprimis*, he had spoken improperly, not to say untruly. For, a creature, as such, is not capable of being made, that is, simply of existing, but only of inexisting.

Now, this we all know, is the *formalis ratio*, or most essential difference of what is called an acci-

* Heb. i. 3. † 1. Tim. ii. 5.

dent. According to the vulgar maxim in the schools, *Accidentis esse est inesse;* and again, *Quod adest & abest sine subjecti interitu*, and the like. And accordingly we find substance, not only defined positively, to be *ens per se subsistens*, but described or explained by this negative distinction, that it does not exist *in subjecto*, or after the manner of an accident, which always necessarily does so.

Not that I have any design to introduce a new way of speaking, or to use myself to call a creature by the name of an accident, for it is not words but things I am concerned for; but only to express my meaning, or rather that of the word of God, by a term or idea commonly understood. For, however it may be strictly true, and, as I think, I have shewn it to be the meaning of the text, that all creatures exist in that precarious and dependent manner, which is peculiar to an accident; yet, as they do not all exist *immediately* in the same common substance, viz. the Son of God, but at several distances or projections from Him, as before explained; it may be said with good propriety, (as also I have before contended) that there is not only one, but many subtances in heaven and earth, even as many as there are beings, in which other beings exist. Nevertheless, (not to say, for this reason also) it may be said with the same, and indeed a greater degree of propriety, that substance is but one, or that there is but one substance, viz. God, or the Son of God; (for it does not belong to my subject, in this place, to make any mention of the difference between these:) for, though one of the creatures of God may relatively be considered as the substance of another; yet this, and all together, are no better than accidents, with regard to the Son of God. And, this relation of inexistence, either mediately or immediately, in the said divine person, (however oddly it may sound) is yet all that can be called the

absolute substance or essence of a creature. For, *accidentis totum esse est inesse.*

In like manner, as we learn from the text, how we ought to define or distinguish a creature, considered generally as such; so, by the same doctrine of inexistence, we have a general and universal canon given us, whereby to define any one particular species of creatures. Which canon is this: to define them only by their differences, without any regard to what we commonly call the substance of either. For now, we find it to be the truth, that there is indeed but one substance, which, being common to all, cannot properly enter into the definition of any.

As for instance. Suppose it to be inquired, after what manner we should define, or declare the essence of matter, or, what is called in physics, *corpus naturale;* in which I comprehend (whatever others may dream) the whole visible world, even all that is meant by heaven and earth, in the text, except the souls of men and angels.

In the first place, I inquire into the meaning of my own intention, which I find to be only this, namely, to tell the difference between mind and matter. And this indeed is all, that has ever been pretended formally to be meant by a definition, however philosophers have perplexed themselves and others, in the *actu exercito* of it.

But now, secondly, we here find the block which others have stumbled at, and so may easily avoid it, which is this; that, not content to shew the difference between matter and mind, by what they find in either, they fancy they have left their definitions imperfect, because they have not distinguished the substances of both. And so they gravely tell us, in their ignorance, that it is not impossible, or, that it cannot be known to the contrary, but that the substance of matter, may be also capable of thought,

and the substance of thought may be—I know not what, material or extended.

But now we plainly see all this to be both false and absurd; and both in two respects.

First, false, as contradictory to the truth of the text, wherein we are told, that there is but one substance, both of mind and matter, which is God, or the Son of God.

Secondly, false, as contrary to what I have elsewhere demonstrated, namely, that the immediate substance of matter is mind; which, as on one hand it forbids us to have any thing to do with substance, in the definition of matter, which would be to include mind in the very purpose of excluding it; so, on the other hand, it shews it to be no less a contradiction, to affirm or suppose the mind itself to be material, for then it would not be mind, but would exist in mind, as all matter necessarily does.

But these I here reckon rather as simple falsehoods than contradictions. For, they are properly contradictions only to those, who are already persuaded of the truth of my *principle*, or if you will, *conclusion*, elsewhere demonstrated; who are, either too few to be reckoned upon, or rather, I believe, too consistent with themselves, to be capable of such apparent contradictions. But when I called them, as before, absurdities, I meant it chiefly to those, with whom I am supposed to argue, whom I chuse, for certain reasons, no otherwise to distinguish, than only by their principles; which here again I say, are not only false, but in their own account absurd, or doubly a contradiction.

First, to their own prime and professed intention, in the business of a definition; which is not, as they confessedly make it, to confound things with, but to distinguish them from one another. And,

Secondly, to their profession likewise, that they know nothing at all of the substance of matter,

which therefore is a demonstration to them, that it can have nothing to do in the difference or definition of it. For this would be to explain a *notum* by an *ignotum;* not to add, what in the conceitedness of their ignorance, they are pleased to add themselves, viz. that it cannot be known to the contrary, but that the substance of matter may be also capable of thought, which rightly (as we see) explained, is the very truth of the matter, and yet directly opposite to what they intend by it.

Here then we may justly say to such philosophers as these, what St. Paul said to the Athenians; *Whom therefore ye ignorantly worship, Him declare I unto you**. For, as those had many Gods, and yet were Ἄθεοι in the world, bearing testimony to this themselves, by their altar dedicated to the unknown God; so these having many substances in their words and writings, are yet professedly ignorant of any difference between them; which, joined to their own definition of the word, is an argument as clear as light, that there can be but one substance. But now this is the very reason why it is not seen; for as the minds of men are generally disposed, they have no other notion of seeing besides that of distinguishing, and are even ready to profess that light itself is not to be seen but by the help of darkness.

But my reader, perhaps, is, by this time, almost impatient to hear what it is I would put as the definition of matter, after using so many words to shew him what does not belong to it.

But to this I answer, I have no new definition, either of matter or mind, to offer to the world; but only to remove the darkness which hath hindered the generality of philosophers from resting on their own evident perceptions: which is done by shewing them that the *substance* of every thing is something different from *the thing itself*, and quite of

* Acts xvii. 23.

another species. And this we have seen to be the primary and original meaning of the text; so that now we have nothing to hinder us from seeing matter as it is. For, as we are first of all agreed, that the natures of things are no other than their differences; and in the next place, that the difference here sought for, is particularly and only that, which is between matter and mind; what can possibly remain for the definition of the thing in question, but that particular difference or property which is most inward and essential to it, which is extension, or, as expressed in the schools, *Habere partes extra partes*, from whence all the other properties or differences of it arise? For to this also may be applied the rule given us in the text, that every thing ought to be considered as *in an archè*.

In a word; we have seen that the world or species called body or matter exists in the world or species called mind or spirit; and that this last exists in a third, as essentially different from the last, as that is from the first; notwithstanding that he has condescended to be called our brother. And therefore, as by leaving out the substance of matter, we cannot fail of defining it as we ought, by fixing only on the principal or most essential difference of it; so, by the same rule, we may and ought to define mind itself. But I shall not here descend to the particular of this, but leave it to my intelligent reader's consideration. For, however he may find himself distressed for words, in which to express his intended definition of a created mind, or soul, or spirit; yet, provided, on one hand, he takes care to exclude the idol of his imagination, which he is apt to call the substance of it, and on the other, to distinguish it sufficiently from matter; he may assure himself he knows as much of the general nature of the being

he is in quest of, as can possibly be known in his present mortal condition.

Now from hence arises another canon or rule whereby to measure the respective excellencies of created things. I mean their natural or essential excellencies; not taking into consideration, either the motions of bodies, or the inclinations of spirits; neither of which belongs to my present subject. Which canon is plainly this. That

The nearer any being or substance stands related, by inexistence, to the first substance of all, the Ἀρχὴ of the whole creation, so much the more perfect or excellent it is.

Thus we find that mind is more excellent than the whole visible world, which may not improperly be called original matter; and that this, in proportion, is more excellent than iconic matter, or the world which we behold as in a looking-glass, or that other before mentioned, which is spread on a piece of paper, in a camera obscura. And the reason of this is plain, because the last of these exists in the second, and the second in the first.

And here comes in a very apposite distinction made use of in the schools, of *formaliter*, and *eminenter;* which, applied to the two ideas of mind and matter (to drop the mention of the looking-glass, &c.) will be found to run thus: that, as matter exists in mind, or is contained in it, it may be properly said of mind, that, besides its own formal perfections, considered as a thinking being, it is also eminently that, which is here supposed to be compared with it, namely, body or extension; and therefore must needs be the more perfect of the two, by the same rule of computation, by which the number two or more, or many several perfections, are more excellent than one.

And thus, by considering each thing in its own

proper Archè or order, and all in general, in the one great Ἀρχὴ of all, who is the Logos and Son of God, we find the truth and propriety of the saying of the wise man, that *God made all things in number, weight, and measure**. Which, though capable of many particular applications; yet, in the general subject we are now upon, must, I think, be understood thus, viz. that mind is more excellent than matter, in these three respects.

1. As having more excellencies or constituent parts in number.

2. As standing nearer the center of all excellencies and perfections, which answers to what we commonly call weight in bodies. And,

3. As containing matter itself, as a kind of part of its own being; which supposes it, in some sense or other, (however our words may fail us) to be of greater extent or measure than the whole material universe.

I observe all this, not only for the dignity and importance of the truth itself, but as in opposition to two ridiculous and childish errors, which are so frequently in the mouths of those, who pass for the wise men and philosophers of the world: who, first, generally stile man, or his whole person, by the name of *microcosm*, or *little world;* and yet secondly, being compelled by evidence to acknowledge the soul to be more excellent than body, have no better measure to account for it by, than by saying, that immaterial beings are more simple than things material; which is not only false or contradictory, but the very contrary, to the truth.

And yet this is the strong foundation, on which we are taught to build the great and important point of the immortality of the soul. For, as mortality is corruption, so incorruption is immortality. And so the business is done, it being evident as noon-day

* Wisdom xl. 20.

that an immaterial, or simple being, is not capable of corruption. and therefore must be immortal: and this is called the *natural* immortality of the soul; an immortality which power itself cannot take from it.

Indeed it would be well for the greatest part of the world, if sin and error (especially such gross abuses of our faculties as these) were no corruptions of the soul of man; but, even this would but little help them to the end they drive at, as philosophers; but rather totally overthrow it. For as the soul appears to be the most compounded being in the world, it must certainly in their account appear to be the most imperfect; and if this does not prove it to be the most naturally mortal and corruptible of any creature in the world, it must be only for this reason, because it proves it to be nothing at all, or a manifest contradiction.

And truly no wonder, for the whole system of this kind of reasoning, is founded on a real contradiction in terms. For there is no accounting for such absurdities as these, but by supposing, that at the same time that they call the soul an immaterial being, they really consider it as material or extended. And, for the truth of this, I suppose I need not confine my appeal only to those, whom I have heard declare as much in express terms, but may extend it to the generality of philosophers, in all the ages of the world. And therefore, no great wonder, if such parents, I mean principles, as these beget children after their own likeness. But to return. I suppose, by this time, my intelligent reader begins to perceive, that I meant something more than empty panegyrick upon the text, when I called it, in the beginning, a compendium of science, and a summary of pure reason or philosophy: and will find, at the same time, that the apostle meant something else, besides words of compliment, upon the Son of God, when he told us, that *In Him are hid all the trea-*

*sures of wisdom and knowledge**. And therefore, lastly, with what exact propriety, he proceeds from hence to caution us against the errors and seducers of the world, saying; *And this I say, lest any man should beguile you with enticing words;* and again, a little after. *Beware lest any man spoil, or make a prey of you through philosophy and vain deceit, after the tradition of men, after the elements of the world, and not after Christ. For in him dwelleth all the fulness of the Godhead bodily.*

Here then we have another canon or criterion, whereby to distinguish the true philosophy from the false. For, though the apostle here calls philosophy in the lump, by the name of *vain deceit*; yet we find he proceeds immediately in the next words, to add the reason of his censure; which reason, if we consider it, is as certain a rule whereby to find the true, as to discover and condemn the false philosophy. And the rule is plainly this,

That we may reckon that to be the false, which is after the elements of this world, and not after Christ; and therefore, that to be the true, which is according to Christ; who is the Ἀρχὴ τῆς πίστεως τῦ Θεῦ, and in whom are hid all the treasures of wisdom and knowledge.

How far this character of the true, is the very difference and distinction of that science or philosophy, which I have been hitherto deducing, I suppose I need not again observe to those, to whom I principally desire to write. And as for the rest, however dignified and distinguished, I have only this to propose to them; that they would not proceed to condemn what they do not so much as pretend to understand. Which habit, though it seems to be but a low degree of virtue, is yet, as I have found by constant experience, so certain a means of light and understanding, that, I can hardly suppose it has

* Col. ii. 3.

ever failed of leading those that are possessed of it, into all the truths they have ever sought for. Ἐὰν μὴ πιστεύσῃτε, οὐδὲ μὴ συνῆτε. *Unless you believe* [*first*] *you cannot possibly understand* *. And this habit of suspending, or not proceeding to judge before we understand, if it is not the whole, is yet, I think, the most considerable part or ingredient, of this necessary means of knowledge, called believing, by the prophet; and, is so sure a step to the whole, either naturally, or by the grace of God, that I would desire no more, than to find all my readers possessed of this virtue. But this must be as it will. And so I proceed to

The last topic of my discourse, which is to observe, (to the great surprize of all the natural philosophers and persons in the world) that even natural science or philosophy itself, truly meant and understood, is wholly owing to the assistance of revelation.

By natural science or philosophy, I do not mean that particular science, which is usually called by that name, and otherwise by that of physics. But I mean the general knowledge of the natures of things; and this, rightly understood, we find to be their inexistence; or, the dependence which they all have, either mediately or immediately, on the *Logos*, or Son of God.

But then, as *no man knoweth the Son, but the Father, and he to whomsoever the Son shall reveal himself* †; we may know for certain, that it is wholly owing to the revelation which he has made of himself, in the scriptures, and more particularly as in the text, that we know any thing truly of the general natures of things, and consequently of true philosophy. For he is, as he has said himself, *Both the way and the truth*, as well as *the life* ‡. That is, as our subject here leads us to understand it, he is not only the principal object, and end, and substance,

* Isa. vii. 9. † Matt. xi. 27. ‡ John xiv. 6.

and every thing else, which is of the essence of true religion, which leadeth to life eternal; but He is also both our logic and our metaphysics; that is, in a word, the truth of truths, and the foundation-stone of the whole fabric of philosophy.

And yet, I do not hereby intend to say, that even our vulgar physics (which we know is founded on a contradiction, and has no dependence on the person of the Son of God) is therefore utterly and wholly false. For, though it has nothing to do, but is rather an enemy to the person; yet it has some foundation in the word of the Son of God, where the language of external matter is almost continually used, and therefore true in his will, though nothing in itself. But, what I say, is this. That either for this reason, it must stand excluded from the sacred name of philosophy, and be contented with the inferior title of a manual or mechanic art, (as not tending in the least to the chief end of man, considered as a thinking being, which is the knowledge of his own, and all the creature's dependence on the Logos, or Son of God, but to the worldly uses and conveniences of life;) or, if it needs will be called philosophy, it may be called also by its christian name of *pithanology* *, or science, *falsely so called* †: and then, we need not much fear the danger of being spoiled or puffed up by it.

And yet, how vainly are we apt to think, that by our mere natural faculties, without the help of the Word or Wisdom of God, we are not only masters and doctors of philosophy; but are also able to delineate a true system of morality, or of religion towards God. And this, forsooth, we call by the name of natural religion.

Well, and let it be so called, since the wisdom of the world will needs delight in contradictions; I can testify no more than this; that,

* Col. ii. 4. † 1 Tim. vi. 20.

As, by faith and prayer, and a diligent meditation on the word of God, I have found for myself, and have here done my best, in short, to convince as many as will attend, that the Logos or Son of God, is the general Ἀρχὴ of being, with respect to all the creatures of God, and consequently, the sole foundation of all that is truly called science or philosophy; so they need not fear, but in bearing me company to the end of this work, they will find much more abundant evidence to convince them that the same pre-eminent and incomparable person is also the Ἀρχὴ of righteousness and power, and whatever else we are taught to comprehend within the name of true religion. For *no man cometh to the Father but by the Son**. To whom be glory and dominion, from everlasting to everlasting. Amen. Hallelujah!

* John xiv. 6.

FINIS.

IN 1732 Mr. Collier published his Logology, or a "Treatise on the Logos, in seven Sermons on John i. verses 1, 2, 3, 14, together with an Appendix on the same subject," and as his theological opinions are, in some points, closely connected with his metaphysical, the curiosity of learned readers will, in all probability, be gratified by the following abridgment of the tenets defended in the above mentioned publication.

Upon the two first verses of St. John he says, "It is apparent from them that Jesus Christ was, according to our translation, before the incarnation, in the beginning, and even before the creation, that he was with God, and was God." "But the word Ἀρχὴ has *other* meanings in the word of God besides the relation that it bears to *time*, and its meaning here is that Christ is the preserver or upholder of all things, Heb. i. 3. All things exist and have their being in him, Acts xvii. 28." "There is an order and manner in which creatures have their being in the world; they were made to exist in Christ as in their *principle;* all created things exist, not all at the *same distance*, but at several distances or *projections*. Men and angels have their existence, *immediately* in the Son, whom St. John calls the Word." After this illustration of Genesis i. 1. which may be found also in the specimen subjoined to the Clavis, Mr. Collier says that "according to St. John in the beginning was the Word, i. e. the Word himself was *in a* beginning: that the article τῇ is not in the original, that though the Word is the principle of all *created* things, yet he is not *absolutely* the beginning of being, but exists himself in a principle, as the crea-

tures exist in him: that the text of St. John should be thus translated, "*And the Word was with* God, and the Word was God, and He, the same, was in a beginning with God;" that πρὸς, commonly translated with, also signifies to or concerning; that in Heb. i 7. πρὸς μὲν τὺς Ἀγγέλυς λέγει, πρὸς is translated of, *or concerning*, and in the next verse πρὸς τὸν υἱὸν, *to* the Son, that it signifies both or either indifferently, as it happens to be spoken of or directed to, the persons concerned, viz. the angels or the Son of God: that it signifies both or either indifferently, because in its first signification it means *with respect to;* that *such* is its signification in the first verse of St. John; that God is the immediate principle of the Word; that there is a *distinction* in the *sound* or *name* of God; that in the text we have *God the Word* existing in a *beginning* with respect to God, i. e. God *existing* and God *inexisting*, God *absolute* and God *respective*, and that the distinctions into which this may be varied, as *pure* and *mixed*, *abstract* and *concrete*, *simple* and *complex*, *one* and *manifold*, are equivalent to the common distinction of God the Father and the Son, which runs throughout the New Testament, and that in each there is some *peculiar denotation*, expressing the *same relation* under *different conceptions*, or, as we may say, *abstractions;* that Christ *is not* and *cannot* be God in the same *sense* of the word in which he with whom the Word is said to be in the beginning is called God; that a distinction is to be made between God *existing* and God *inexisting*, God *absolute* and God *respective;* that from the words, "*being with God* before all time, it does not follow that the Word is absolutely or universally *consubstantial* or *coequal* with him;" "that of *consubstantial* there are *two notions*, first, as one thing exists *in* the other, and, secondly, as both exist *jointly* and *immediately* in a *common* or

third substance: that in the *last* sense of the word all material things are consubstantial with *each other*, and such are the souls of men and angels, and that as *matter exists* in *mind*, *so minds exist in* the one Ἀρχὴ or beginning of the creation, the only begotten of God, and that in the first sense of the word every soul that exists in *him* is *consubstantial* with him, as he is our *immediate* principle or substance: that he is content to call this by the name of consubstantiality, though it be a word of our *own creation:* that in the second sense of the term, viz. that God and the Word do exist jointly and immediately in a common substance, the Antiochian fathers, half a century before the Council of Nice, rejected it; that though according to Bishop Bull the Council of Nice established the term in a different sense, his own explanation is the very *same* with that which the fathers of Antioch had rejected, illustrated by the very *comparison* which Mr. Collier uses, namely, *the consubstantiality of souls or spirits with each other:* that, though in *one* possible sense the Word or Son is consubstantial with the Father, little can be done to save the credit of the attribute *co-equal;* that to say the Son is absolutely supreme God is not the language of the *New Testament*, and as he particularly contends, not of the text, for "how can He be said to be absolutely the supreme God, whose *existence is inexistence*, and whose being or nature is *respective* to another, who by way of distinction is *absolutely* called God."

I have stated with all possible fairness the peculiar opinions and reasoning of Mr. Collier, though I am neither convinced by the one, nor much enlightened by the other.

In sermon the second he enters into an explanation of the proposition that the word *was with* God. He had endeavoured to show in the first sermon that the Word was immediately united to

God, inasmuch as God was his immediate principle or substance. But that He who is called the Word with respect to God is that Word of God by whom *the heavens were made**, and by whom the Father *made the world*†, is equivalent to the language of St. John in verse 3, where it is said, "*all things were made by him, and without him was not any thing made that was made.*" He then, as our immediate principle of existence, is or was our immediate Creator, so *truly and universally* the Creator of all things, that there is not any one thing excepted, either in heaven or in earth, of which he is or was not the immediate Creator." He would render the words made universally in their relation to every thing that has been done or is called the work of God, as well *since* the beginning, as at the time of the creation—"*all things have been done by him, and without him has not any thing been done that has been done.*" The proof of this proposition he reserves to a separate discourse upon the declaration of St. John that *the word was God.* The rest of the second discourse is employed in proving what he calls the "*mystery of strict creation,* contained in this proposition that the Word was the immediate Creator of all things, or that God made all things, without exception, by his Son." While he is endeavouring to establish this proposition, he refers to the opinion maintained in his Clavis, "*that matter necessarily exists in mind, or in the soul of him that seeth or perceiveth it, and so may in some sense be said to be caused or created by it (as depending in some measure on our particular wills, which is as much as to say, that it is too near to nothing to exist, or be caused immediately in or by any higher principle)* so," says he, "May not the same be applied to us, that our natures and essences are too vain

* Psalm xxviii. 6. † Heb. i. 2.

and empty to be capable of being the immediate creatures of pure God."

"Since we are here, it must needs be true, that there is a mean proportional between pure God and us; because if there were none, we could not exist at all, but were as absolute nothings as he is absolute being."

"But *what* is this mean proportional between God and us? Why, the answer to this is the truth of the text, which saith, that all things were made by the Word of God, i. e. not *immediately* by God himself, but immediately by his Word or Son; and therefore, *consequently* by pure God; because He, our immediate Maker and Creator, is the Son of the Father, and the Word of pure and absolute God."

Now this, as he observed before, is, he thinks, *all* that is *revealed* to us concerning the manner or mystery of creation. He does not say that this is the *whole* truth of the matter. "But still, if it is all that God hath told us in his word, it may justly be called *our all*, as we are not capable of proceeding any farther."

The third discourse is upon these words, "And the word was God," where he would show how "this our immediate principle and Creator, was the doer and disposer of all things that had been done or said to be the work of God—in all the periods of the Old Testament dispensation, i. e. from the beginning of the world to what is said in the fourteenth verse, that "the Word was made flesh and dwelt amongst us."

He founds this proposition upon the authority of the text, "And the Word was God," and he again unfolds the import of the same proposition by saying that "the person called the Word was he that was called God before his coming in the flesh, and that he was the God who was called Jehovah,

and the Lord God, Elohim, and the Lord of Hosts, in the writings of Moses, and of the prophets who came after him; that is, in a word, the God revealed of the Old Testament."

In explaining Heb. i. 2. he says that αἰῶνας, which we translate the *world*, is properly to be rendered *ages*, and that the ages or periods of the Old Testament are from Adam to Noah, from Noah to Abraham, from Abraham to Moses, and so on to John the Baptist, who was the introducer of the present, and the finisher of all the ages of the Old Testament. In answer to the question, whether "it was not true that the Father was at the same time the God of Israel," he says, "Yes, certainly, it was as true as that He was *then* the God and Father of his *Word* and *Son;* which is not an *historical*, but an *absolute* and *eternal* truth. But still we find it to be true (in the historical way) that the Son and *not* the Father was the God of the Old Testament. And what can be the truth of this, but that the *name* of the Father was not at *that time* revealed; and so the person of the *God revealed* was *not* the Father, but the Son."

In sermon four, he interprets John i. 14. "And the Word was made flesh," and of this assertion, in connection with what he had before said, he "takes the whole meaning to be this, that He, the same who was the Word of God, by whom the heavens were made; who was also the very person who had once been in the form and majesty of a God, and was the God revealed of the Old Testament: He, lastly, who had been called the angel of the covenant, and of the presence of God; and was indeed an angel, both by nature and office; (though we believe that by inheritance he obtained a more excellent name than all the rest of the order, Heb. i. 4—9.) did at a certain time come down from all his glory, power, happiness and perfection,

and become a Son of Man, in the ordinary method of being born of a woman; thereby making himself subject to all the miseries and infirmities of our present human nature, state or condition."

He observes, that in "all the accounts given of our Lord, or the Word, we find not a syllable of any other or third idea besides the Word and the Flesh, that when God is said "to be manifested in the flesh," that, the "second man is the Lord from heaven;" that "forasmuch as the children are partakers of flesh and blood, so also Christ likewise took part of the same:" "we find not the least mention or intimation of any human soul or created spirit, which was united to the Word at the instant of the incarnation, and created for this end, to be the bond of union between the word and the flesh."

After remarking that "a time has been when "during the sleep of the watchmen of the church, so "very a tare as the belief of a human soul united to "Christ, and created at the instant of incarnation, "had been sown in upon the Word, during the sleep "of the watchmen of the church, as it is expressed "in our Saviour's parable of the tares;" he supposes that "there are yet a certain few who are not yet "fast asleep, and those few he desires to consider, "that it is not pretended by the patrons of the opi-"nion which he opposes," "that there is any one pas-"sage to be found in the word of God, which has any "such expression in it as that the Word did assume, "or was united to, an human spirit; notwithstanding "that they have imposed it on themselves and others, "as the principal test and trial of orthodoxy—that "we are absolutely and frequently forbidden to add "to or diminish the word of God, and that the ad-"dition of a human spirit to the pure tradition of "the text does diminish the force and even deny the "truth of what is plainly taught as concerning the "mystery of our Lord, the God of Israel, being

" manifested in the flesh, and suffering for our re-
" demption."

He observes that it is " possible for those who
" hold this addition so to contrive that they may not
" contradict themselves in the same breath, but at
" different times, as they speak upon different sub-
" jects. That thus in speaking of the incarnation
" they may take no notice of the sufferings of Christ,
" but only the constituent parts of his composition,
" and so here they may insert their doctrine of the
" human spirit without expressly denying that it was
" God the Word who suffered death on the cross;
" and that on the other hand, in speaking of the
" sufferings and death of Christ, they may drop the
" mention of the human or created spirit, and then
" may freely tell us that the Word, the Son of God,
" was made partaker of our infirmities, and may ex-
" patiate upon the infinite value of his sufferings;
" that this is exactly the very management of the
" affair whereby they deceive themselves, into a fond
" opinion, that they do not really contradict either the
" scriptures or themselves; but that in one particular
" instance the contradiction is so very flagrant that
" they can hardly chuse but see it, because the op-
" posite assertions are most commonly found toge-
" ther; as when they tell us, that at the incarnation
" of our Lord he assumed or was united to a particu-
" lar human spirit which was united to the flesh, they
" seldom or never fail to hold us down to that form
" of words as the language of pure antiquity, namely
" that our Lord, the Word, did assume the human
" nature, but not any human person, as an human
" spirit united to an human body was not properly
" a person, even in their own sense of the words."

In sermon the fifth he takes a view of what
" is commonly urged in favour of the addition from
" reason, as that, whereas our Lord assumed the
" frailty of our flesh, he would not certainly omit to

" assume a human spirit, which is by much the nobler " part of our composition, and that without a human " spirit he could not have been a man." To the first he answers, " if this had been the fact of our Lord's " incarnation, it cannot possibly be imagined that " the perfect word of God should only tell us that he " became flesh, or omit to inform us that he also as- " sumed an human soul or spirit, which is so much " the more noble part of our composition." Upon the second he asks, for " what reason should he not be called a man, even if he did not assume an human spirit?" " It is supposed by consent between all " parties that he had something at least equivalent to " what is called a human spirit, or (according to Col- " lier's notion) that the place of human spirit was " supplied by another spirit, namely, the Word and " Son of God," as formerly he had been man or angel god. " He formerly had been an angel, but " after the incarnation he could not justly be called " by the name of angel, because by this very act he " quitted that name or character to become the son " of man, and if a proper name be demanded for " him now, he might be called θεάνθρωπος!" Collier objects to his adversaries their disuse of this ancient and proper way of speaking, " to which disuse they " were compelled in consequence of their addition of " the human spirit, and were farther compelled to " divide the Word from the man, and to call him God " and man instead of God-man." After objecting to the term *human nature* in its common acceptation as including all the essentials of our composition, he allows that " the Word so far took our " nature upon him as to be born of a woman, and so " by natural consequence become subject to all the " miseries and infirmities of our human state."

Having discussed the arguments drawn from reason in the fifth discourse, he proceeds in the sixth

to examine the scriptural proofs adduced in favour of the opinion "that our Lord had a human spirit, as that Jesus increased in wisdom and stature, that, in his prayer to the Father he had said, "Not my will, but thine be done;" that his soul is said to be exceedingly sorrowful, even unto death; that he commended his spirit into the hand of God, and that if he had not a human soul together with the flesh, they who maintained he had not should be challenged to explain in what sense he could be said to die?" To these arguments he replies with his usual acuteness and vivacity.

In the seventh sermon he states and endeavours to refute what "is commonly urged in a more direct opposition to that which he considers as the scripture account of the incarnation of our Lord." In repelling the charge of absurdity and blasphemy, he makes some sharp remarks upon his antagonists, who "when Christ is said by himself to make atonement for our sins, own that in strict propriety the terms do say that the Word did suffer in the flesh, but maintain, that instead of standing upon the propriety of the expressions, we must interpret them so as to make them agreeable with the principles of reason." "These, by the way," says he, "are your great defenders of mystery, who are "continually telling you that you must not use your "reason in matters of faith: that is, when you call "in question any mystery of their own inventing. "But you see how they change their note when "you offer them the word of God. But since we "have begun, let us end the controversy with them. "And so I answer as followeth. You say, you be- "lieve the word, but would fain reconcile all its say- "ings to reason! But have you never tried to recon- "cile your reason to the word of God?"

He supposes that "his antagonists will call "himself and others who deny the union of the hu-

"man spirit, by the name of heretics, either Arian "or Apollinarian, but most probably the last, be- "cause according to church history and the manner "of these times, Apollinaris was condemned as an "heretic for peaceably, (as Collier supposes,) main- "taining that the Word was made flesh in the proper "and obvious sense of the words."

In the conclusion of the seventh sermon we have these striking, and in one respect only, I must confess, offensive words: "How necessary it is to "believe the word, in order to be a just interpreter "of it; and yet how rarely this necessary qualifica- "tion is found amongst us? Secondly, how danger- "ous a thing it is to speak of the truths of God in "unscriptural terms or phrases? And how naturally "the use of these does involve us in the guilt of "adding to the word of God? Thirdly, how exceed- "ing baneful are the rudiments of philosophy, when "applied to the word of God; and so much the more "pernicious when we use them to explain the fun- "damentals of our faith?"

The appendix consists of thirty-three pages. It is written with great vigour, and contains what Collier calls "Plain and short answers to a book intitled "Plain and short arguments from scripture, proving the Lord Jesus Christ to be the supreme God, or one and the same God with the Father; notwithstanding his acknowledged inferiority to the Father with respect to his human nature and mediatorship."

The reader will do me the justice to believe, that in stating Mr. Collier's opinions upon the language of St. John, I have not the smallest intention directly or indirectly to insinuate my own. I mean to *describe*, not to *vindicate* or *recommend* those opinions; and surely they who are struck with the peculiarity of Collier's metaphysical system, cannot be wholly incurious about those theo-

logical tenets which he held with so much apparent sincerity, and defended with so much dexterity and so much ardour. The resemblance between his philosophy and his faith is manifest from what he says upon the distinction between existence and inexistence. The similarity of his opinions to those of Apollinaris was not unsuspected by himself, and may be illustrated by the following quotation from Lord King's History of the Creed. "The heresy of Apollinaris was, according to St. Austin's expression, that Christ (De Hæres, cap. 55. p. 182.) assumed flesh without a soul, or, as Cassian words it (De Incarn. Christ. lib. 1. p. 1241.) that he had not an human soul, or a rational soul; for he allowed him a sensitive soul as in brutes, but denied him to have a reasonable one, as Vincentius Lirinensis writes (Comment. cap. 17. p. 50.) that Apollinaris affirmed, that there was not in our Saviour's body an human soul, at least not such a one wherein was mind and reason; but that (Epit. Hær. Fab. lib. 4. in Hær. Apol. p. 167.) instead thereof his divinity supplied its room and place. So that in short, the error of Apollinaris was this; that though Christ in his becoming man was ἐνσαρκος, that is, was incarnate, had real flesh and a substantial body, yet he was not ἔμψυχος, that is, he had no reasonable human soul, but his divinity performed all the actions and offices thereof *."

They who wish for farther information upon this subject would do well to consult the article Apollinaris inserted in volume the second of the General Dictionary, and written with great ability by the Reverend John Peter Bernard.

When the reader reflects on what Mr. Collier says, about "the danger of speaking in unscriptural phrases of the truths of God, and the banefulness of applying to God's word the rudiments

* See p. 247, of King on the Apostle's Creed.

of philosophy," he cannot fail to observe, that Collier's interpretation of the text in St. John is founded upon his own philosophical distinction between existence and inexistence; is illustrated by reference to his peculiar hypothesis, that matter necessarily exists in mind; and is expressed in language which bears little resemblance to the simple unadorned phraseology of the Gospel.

CONJECTURÆ QUÆDAM

DE

SENSU, MOTU,

ET

IDEARUM GENERATIONE.

DAVIDE HARTLEY AUCTORE.

CONJECTURÆ QUÆDAM,

DE

SENSU, MOTU,

ET

IDEARUM GENERATIONE.

LICEAT, huic de Lithontriptico Dissertationi, subnectere nonnulla de Sensu, Motu, atque Ideis; quæ, quamvis ab ea aliena sint, ad Medicinæ tamen Theoriam generalem pertinent, eique promovendæ inservire possunt. Hauriuntur enim ex hac Theoria, qualis ab Anatomicis et Medicis jam elaborata est, collata cum iis, quæ *Newtonus* de Vibrationibus per Animalium cerebra propagatis, *Lockius* autem, & post eum alii Viri celebres, de Associationis in mentem humanam vi, tradidere. Tantis utique adjumentis & auctoritatibus fretus, olim agressus sum ulteriorem enucleationem Sensationum, Motuum et Idearum; tandemque videor mihi ipsi incidisse in aliquam speciem Veri. Sentio interea multas subesse dubitandi causas, multaque contra afferri posse. Quocirca decrevi, harum rerum Theoriam quandam conjecturalem breviter delineare, atque, arrepta hac occasione, Medicorum et Philosophorum libero examini subjicere; ut exinde edocear, quid corrigendum, delendum, vel denique retinendum fuerit. Proposui autem Conjecturas

meas, utut rudes & incertas, sub forma Demonstrationum mathematicarum, eo quod hæc forma commodissima videatur ad rerum discutiendarum vim et mentem rite assequendam.

PROP. 1.

Substantia alba medullaris cerebri, medullæ spinalis, & nervorum inde oriundorum, est instrumentum proximum Sensationum & Motuum.

Patet ex Physiologia & Pathologia. Sub nomine *cerebri* complector cerebrum proprie dictum, cerebellum & medullam oblongatam.

PROP. 2.

Substantia medullaris cerebri est etiam instrumentum proximum Idearum; i. e. Variatur status hujus substantiæ pro varietate Idearum, quæ Animæ obversantur.

Patet ex iisdem; præsertim vero ex historia Sensuum internorum, & Phænomenis morborum, in quibus mens laborat. Quinetiam utraque propositio ulterius confirmabitur ab insequentibus.

PROP. 3.

Sensationes manent in Anima, per breve temporis intervallum, post objecta remota.

Satis constat in visibilibus & audibilibus; De cæteris idem inferre licet ex Analogia.

PROP. 4.

Objecta, sensibus externis impressa, excitant, primo in nervis affectis, deinde in cerebro, Vibrationes particularum minimarum medullarium.

Per Vibrationes particularum intelligo earundem itus & reditus, sive oscillationes; brevissimas quidem, sed ejusdem generis cum oscillationibus corporum funi-pendulorum, & tremoribus sonan-

tium. *Particularum* dico; nervos enim ipsos Vibrationibus, aut oscillationibus, agitari, more chordarum musicarum, nullus assero, neque omnino credibile est.

Propositio evincitur ex hac jam dicta commoratione Sensationum in Anima, utcunque brevi. Vix enim concipi potest quævis motus species, vibratoria excepta, quæ huic conditioni satisfaciat. Necesse est autem, ut aliquis motus imprimatur nervis & cerebro ab objectis sensuum; cum hæc, utpote corporea, in nervos & cerebrum, itidem corporea, agere non possint, nisi motum iis imprimendo. Porro uti hæc propositio sequitur ex præcedente, ita hac concessa sequetur illa; & locum habebit in tactu, gustu & olfactu, pari ratione, ac in visu & auditu.

Prop. 5.

Vibrationes excitantur in nervis & deinde cerebro communicantur, ope Ætheris, *sive spiritus cujusdam subtilissimi; adjuvantibus etiam uniformitate, continuitate, mollitie, & viribus activis substantiæ medullaris nervorum & cerebri.*

De his singulis pauca sunt præmittenda.

Spiritum subtilissimum, & summe elasticum, atque proinde Vibrationibus recipiendis & communicandis aptissimum, tum latere in corporibus crassis, tum per spatia his destituta diffundi, credibile visum est *Newtono*. Hunc porro spiritum nomine *Ætheris* ideo insignivit, ut sub hac simplici & appropriata appellatione de eo commodius disseretur; monuitque videri esse rariorem in corporibus crassis, densiorem in circuitu eorum, densitate ejus semper increscente, quoties ab iis receditur. Verum omnino consulendus est *Newtonus* ipse de existentia & proprietatibus hujusce Ætheris, cum admodum incertus hæream, an mentem ejus satis assecutus fuerim. Optandum est, ut in lucem emit-

tantur, siqua alio de hac re in scriptis ejus posthumis compareant: Imo optandum, ut summi hujus optimique Viri opera omnia posthuma ocius publici juris fiant; cum illud non potest non esse magno Rei Literariæ, Philosophiæ, & Religioni, emolumento.

Uniformitas & continuitas substantiæ medullaris cerebri & nervorum, patent, aliquo modo, ex ipsorum sensuum testimonio. Verum sequi etiam videntur a vasorum hujus substantiæ exilitate, omnem conceptum fugiente. Cum enim substantia medullaris oriatur a corticali, ordines autem ultimi vasorum hujus exiliores sint, quam ut subtilissimæ Injectiones eos ingrediantur, verisimile est illam constare e vasis, fluidisque, longe minoribus, quam ut Vibrationes infra describendæ turbentur, aut intercipiantur, a vacuitate quavis notabili, vel inæqualitate texturæ. Quin et facile concipi potest, diffluentem illam mollitiem, quæ in substantia alba medullari observatur, ex eadem vasorum ejus exilitate nasci.

Moveri solet quæstio, an nervuli simplices, ultimi, pro capillamentis solidis, e vasorum, uniformiter inter se intertextorum congerie, constantibus, cum *Newtono* haberi debeant, an pro tubulis cavis cum *Boerhaavio*. In priorem partem ipse feror, cum Doctrina Vibrationum illud postulare videatur. Interim notandum est, quæ de systematis nervosi structura & muniis tradidit *Boerhaavius*, & pulcherrima esse, & cum hac Doctrina satis congruere, si modo pauca excipias.

Quæri etiam potest, annon tenuissimæ quædam piæ matris propagines se inserant inter singulas substantiæ medullaris regiones, harumq; divisiones minores; atque illas a se invicem separando, continuitatem supra dictam aliquo modo interrumpant. Respondeo, hoc verisimile esse ex Analogia membranæ cellularis, neque tamen adversari Doc-

trinæ Vibrationum, sed, potius ei favere, concessa duntaxat attenuatione propaginum, ubique sufficiente, et varia in locis variis; cum Phænomena postulare videantur, ut propagatio Vibrationum per substantiam medullarem cerebri, sit ubique quidem libera, non tamen æque libera. Cæterum qua ratione regiones diversæ cerebri, nervique inde oriundi, sibi invicem communicationibus intermediis uniantur, illud alta caligine involutum est, & forsan semper involvetur, ob summam hic loci mollitiem, exquisitissima Anatomicorum artificia eludentem. Interim dari communicationes hujusmodi, tum in cerebro, tum in nervorum plexibus, & gangliis, quæ sunt quasi cerebra minutula, secundum *Cl. Winslovium*, dubitari nequit.

Proximo loco accedamus ad vires activas particularum substantiæ medullaris expendendas. Jam vero aliquas vires, aut attractivas, aut repulsivas, aut potius utrasque, variata nimirum distantia, illis competere, negari vix potest, tot exemplis virium hujusmodi, in particulis corporum minimis delitescentium, a *Newtono* adductis. Fieri etiam potest, ut exilitas particularum e quibus substantia medullaris componitur, augeat earum vires, ratione molis habita, sicut idem *Newtonus* innuit respectu particularum Ætheris; atque ut particulæ fluidorum sint exiliores, adeoque magis actuosæ, solidorum particulis. Et sic tandem Fluida, in vasis minutissimis substantiæ medullaris circulum obeuntia, pro Succo nerveo actuoso, Spiritibusve Animalibus, habere licebit; & præcipua, quæ pro recepta Hypothesi adducuntur argumenta, *Newtonianæ* accommodari possunt facili negotio.

Veniamus jam ad ipsam propositionem.

Concessis itaque existentia Ætheris, & uniformitate, continuitate, mollitie, viribusque activis substantiæ medullaris, concipiendum videtur,

Primo; Objecta externa, nervis sensoriis im-

pressa, excitare Vibrationes in Æthere ibi latente, ope actionum mutuarum inter hæc tria, objecta nimirum, nervos, & æthera; quæ quidem actiones mutuæ obtinere videntur in sensibus universis, licet in diversis multum discrepent inter se. Hæc generatio Vibrationum in Æthere, similis est ei, quæ fit in Aere a vi percussionis, quando corpora per eum celeriter moventur.

Secundo; Concipiendum est, has Vibrationes Ætheris agitare particulas minimas nervorum affectorum Vibrationibus isochronis, eadem ratione, qua Vibrationes Aeris agitant particulas corporum quorundam uniformium, Vibrationibus sibi itidem isochronis. Huc conferunt uniformitas, mollities, & vires activæ substantiæ medullaris. Fieri potest fortasse in casibus nonnullis, ut ipsa objecta excitent Vibrationes in particulis nervorum minimis, actione immediata; eodem fere modo, ac tremores excitantur in corporibus sonoris ab aliorum corporum ictibus impressis. Rebus ita constitutis, Vibrationes Ætheris potius censendæ sunt modificare, & sustentare Vibrationes particularum, quam eas ex integro suscitare.

Tertio; Vibrationes, sic excitatæ in nervis sensoriis, propagantur per decursum nervorum versus cerebrum. Hoc fit præcipue ope Ætheris uniformiter disseminati per poros minutulos, & uniformes, substantiæ medullaris. Verum conspirant etiam, uti dictum est in propositione, uniformitas, continuitas, mollities, & vires activæ ipsius substantiæ medullaris. Hoc enim pacto fiet, ut particulæ novissime agitatæ usque communicent motus suos, i. e. Vibrationes, proxime positis, similibus utique & æqualibus, sine interrptione, & fere sine imminutione. Decursus sonorum per superficiem aquæ quiescentis, respondet aliquo modo huic decursui Vibrationem per nervos.

Quarto; Vibrationes jam laudatæ cohibentur

intra limites substantiæ medullaris, vel saltem non diffunduntur in partes circumpositas, nisi vi admodum imminuta, eo quod hæ partes sint duriores & heterogeneæ, ætheraque heterogeneum foveant in poris suis irregularibus; quod quidem fit pari fere ratione, ac soni, per superficiem terræ sese diffundentes, magis turbantur & intercipiuntur, quam qui per aquam quiescentem decurrunt. Excipiendæ tamen sunt fibræ musculorum & membranarum, sicut infra docebitur.

Quinto; Quam primum Vibrationes per nervum sensorium ascendentes pervenerint ad cerebrum, imminuentur pro ratione materiæ agitatæ, prorsus ut soni; *i. e.* quasi in reciproca duplicata ratione distantiarum ab ingressu nervi affecti in cerebrum. Quod si piæ matris propagines aliquo modo separent diversas regiones cerebri a se invicem, Vibrationes erunt validiores in regionibus nervo affecto respondentibus, debiliores in reliquis, quam pro hac ratione.

Censenda est igitur hæc propositio præcedenti explicandæ potissimum inservire. Verum potest etiam et a præcedente deduci, & ad eam probandam ipsa usurpari. Namque si sensationes oriantur a Vibrationibus in cerebro excitatis, opus erit fluido subtilissimo, & summe elastico in hunc finem. Et vicissim, si detur hujusmodi fluidum, fieri vix potest, quin poros medullaris substantiæ, quantumlibet minutos, penetret; & ibi commorans, tum ipsum in Vibrationes agi, tum has substantiæ illi communicare.

Natura porro caloris, facilis reflexio & transmissio radiorum lucis, altermis vicibus recurrens, tremores corporum sonantium, Vibrationes Aeris per quas soni propagantur, propagatio eorundem tam per contiguitatem corporum solidorum, quam per Aerem, undulationes aquæ, Phænomena Electricitatis & Elasticitatis, suo quæque modo & gra-

du, suadere videntur, motus quosdam reciprocos locum habere in aliis Phænomenis naturalibus; non secus ac attractiones obviæ Gravitationis, Cohæsionis, Electricitatis, & Magnetismi, cum repulsionibus duorum posteriorum, suspicionem movent, vires aliquas ejusmodi, licet subtiliores & minus conspicuas, obtinere in particularum corpora componentium ordinibus descendentibus. Neque horum omnium, motuum reciprocorum scilicet & virium, in se mutuo involutio, quicquam obest conclusioni utrivis; cum hujus generis involutiones ubique occurrant, etiam in rebus certissimis. Fieri etiam potest ut hæc omnia, mutuæque eorundem involutiones omnes, pendeant ab uno, alterove principio simplici. Huic certe favent, quotquot hucusque in lucem datæ sunt, rerum complexarum Analyses.

Cor. 1. Vibrationes particularum medullarium discrepare possunt inter se respectu triplici; gradu scilicet, specie, & loco. Gradu discrepare censendæ sunt, prout validiores fuerint, vel debiliores; *i. e.* prout Æther plus minusve condensatus fuerit in Pulsuum punctis mediis, rarefactus in eorum intervallis; sic enim particulæ ibunt & redibunt per longius breviusve spatiolem; specie, prout plures sunt vel pauciores dato tempore: loco, prout hanc vel illam regionem cerebri præcipue occupant.

Cor. 2. Magnitudines sensationum sunt fere proportionales Vibrationibus in cerebro excitatis. Negligi enim plerumque possunt, ob parvitatem suam, quæ in medulla spinali, & nervis ipsis excitantur.

Cor. 3. Est itaque Cerebrum quasi sedes Animæ sentientis, sive sensorium Animalium, etiam ex Hypothesi, quod Anima sentiens æque arctam affinitatem habeat cum omnibus partibus substantiæ albæ medullaris cerebri, medullæ spinalis, & nervorum, secundum prop. 1^m. Sin vero aliquo modo ab hac recedendum sit, & supponendum potius,

quod uti partes externæ, (cutis puta, vel tunicæ oculi) nervis; ita nervos & spinalem medullam cerebro, cerebrumque ipsum Animæ sentienti famulari; a fortiori concludendum erit, sensorium Animalium in cerebro locari debere, forsan in parte quadam intimiore. Adsunt profecto nonnulla, quæ huic opinioni favent.

Cor 4. Concessa existentia Ætheris, prout deducitur, vel ex hac & præcedente propositione, vel ex iis, quæ pro Doctrina Vibrationum faciunt, in propositionibus insequentibus stabilietur usus ejus in resolvendis aliis Phænomenis naturalibus.

Prop. 6.

Phænomena Voluptatis & Doloris videntur satis convenire Doctrinæ Vibrationum.

Sensationum Accidentia primaria sunt Voluptas & Dolor. Expectari igitur potest, ut Doctrina Vibrationum horum Phænomenis apte explicandis inserviat. Expendamus ea sigillatim.

Primo itaque, Probabile videtur ex Phænomenis, Voluptatem unamquamque differre a Dolore respondente & opposito, tantum gradu; adeoque Dolorem esse nil nisi Voluptatem, quasi auctam ultra certum limitem. Sic calor gratus increscendo transit in dolorificum; & idem obtinet in lumine, & sonis. Medicamenta porro sunt plerumque ingrati saporis & odoris, utpote linguam & nares vi nimis valida ferientia; dum alimentia vulgaria, quæ hæc organa leniter tantum movent, Voluptatem præbent. Postremo, Dolores quam plurimi decrescendo tandem migrant in Voluptates; clarissime enim percipi potest, ipsam partem, quæ nuper doluit, jam sensu grato affici. Statim vero apparet hæc omnia facile accomodari posse Doctrinæ Vibrationum; modicæ enim gratorum objectorum impressiones

censendæ sunt excitare Vibrationes modicas; validæ ingratorum, validas.

Secundo; Dolor oritur a quavis manifesta solutione continui in partibus viventibus. Jam vero facile patet, Æthera in nervis latentem, quam maxime agitari debere ab eorum cohæsione soluta; hæc enim non oritur nisi a validissima impressione objectorum; adeoque secum ferat oportet validissimas item actiones mutuas inter objecta, nervos, & Æthera. Solutio itaque continui Dolorem pariet, non Voluptatem, per Phænomenon præcedens.

Tertio; Dolor etiam oritur a quavis notabili extensione partium. Mutantur enim ab extensione situs, & actiones mutuæ particularum minimarum, adeoque actiones item mutuæ particularum & Ætheris; unde liquet Æthera cieri oportere in Vibrationes, pari ritu ac ab objectorum impressione, easque validas & dolorificas, si extensio fuerit notabilis. Neque negligendus est calor auctus in extensionibus a majori frictione humorum circulantium.

Fieri etiam potest, ut in omni extensione præternaturali, particulæ minimæ a se invicem jugiter secedant, solutione continui invisibili iterum atque iterum facta, usque dum partes extensæ se, situsque & actiones mutuas particularum componentium, novo huic statui accomodaverint. Et vicissim, post manifestas solutiones continui, secando, lacerando, vel urendo factas, oriri videtur vasculorum & fibrarum minimarum extensio, dolore idcirco renovato & protracto.

Quin et quæri potest in universum, annon limes communis, medius inter Voluptatem & Dolorem, constitui debeat in solutione continui particularum medullarium minimarum; cujus est quasi Typus & Instrumentum, manifesta illa solutio continui, quæ a vi externe illata oritur. Itemque an-

non Natura resarciat has solutiones invisibiles, eadem fere ratione, qua manifestas; multo autem facilius & citius; donec tandem substantia medullaris occallescat, & insensibilitati, mortique cedat. Nonnihil in hac re ponderis habet, conjecturas de invisibilibus duci oportere a visibilibus. Dignus interim est hic locus, qui a Medicis penitus exploretur.

Doctrina autem Vibrationum plane favet huic de limite medio positioni. Possunt enim Vibrationes aut adeo lenes esse, ut iis cessantibus, particulæ minimae medullares redeant ad solitas distantias, viresque mutuas, Voluptate illas idcirco comitante; aut adeo violentæ, ut agitentur particulæ ultra sphæras suarum attractionum, a se invicem dissocientur, & in novos amplexus ruant; ac proinde Dolor oboriatur.

Quarto; Impressione eadem in quodvis organum sæpius facta, languet sæpenumero ensatio inde oriunda, adeo ut Dolor in Voluptatem migret, Voluptasque perpetim imminuator. Hoc probe congruit cum modo dictis. Ea enim est corporum animatorum, forte organicorum quorumvis, natura, ut se accomodent statui cuivis sæpius inducto. Eadem itaque impressio sæpius repetita, si dolorifica sit, semper efficiet minus insignem olutionem continui; vel si Voluptatem ferat, semper magis magisque recedet ab hoc limite communi, versus partes insensibilitatis. Est porro hoc Phænomenon quartum ejusdem generis cum supra memorato transitu Doloris decrescentis in Voluptatem.

Quinto; diversi gradus & species Voluptatis & Doloris, oriri posse videntur ex variis combinationibus Vibrationum, prout hæ differunt inter se loco, gradu, & specie. Fieri enim potest, ut Vibrationes cadant intra limitem medium in una regione cerebri, dum in alia eundem transgrediantur, idque modis quam plurimis & diversissimis. Componantur hæ diversitates loci, cum diversitatibus gradus & spe-

cieri, sive cum iis, quæ nascuntur a varia vi & frequentia Vibrationum; et statim apparebit, omnes Voluptatum & Dolorum diversitates exinde deduci posse.

Sexto; Probabile est varias sensationes adiaphoras, quæ per quinque sensus externos in Animam incurrunt, ex iisdem fontibus derivari. Hæ enim omnes in statu suo primo, aut Voluptatibus, aut Doloribus annumerandæ sunt; utut post impressiones satis repetitas, fiant adiaphoræ, methodo sub Phænomeno quarto exposita. Interim non est diffitendum, differentias specificas Vibrationium, quibus aut ejusdem, aut diversorum sensuum sensationes variæ inter se distinguuntur, esse investigatu difficillimas. Conjicere forsan liceat, Vibrationes a coloribus primariis excitatas, esse numero proportionales Vibrationibus chordæ musicæ, secundum scalum tonorum a *Newtono* positam. Quod si in organis gustus & olfactus, huic Problemati resolvendo pares essemus, verisimile est exinde deduci posse multa, ad abditas corporum naturas spectantia.

Septimo; Dolor excitat contractionem in fibris membranarum loco affecto vicinarum. Patet hoc ex Pathologia. Optime vero congruit cum iis, quæ infra dicentur de Vibrationum effectu in motu musculari generando. Cum enim Vibrationes mediocres, fibris rubris muscularibus contrahendis sufficiant; quidni violentiores illæ, quæ Dolorem pariunt, contrahant fibras membranarum pallidas, licet per se minus contractiles?

Addi potest, Dolorem se minus diffundere solere in partes circumpositas, quam Titillationem & Pruritum, qui sunt medii inter Voluptatem & Dolorem. Hi enim tantum agitant membranas vicinas, adeoque per eas decurrere possunt; Dolor autem, fibras membranarum contrahendo, sibi ipsi viam, & propagationem in partes adjacentes, quodammodo præcludit.

Octavo; Partes extremæ & acuminatæ, quales sunt extremitas nasi, papillæ mammarum, & extrema digitorum, pruritui, irritationi, & sensationibus exquisitis, præ cæteris obnoxiæ sunt. Huic congruit, quod densior Æther, undique circumfusus partibus extremis secundum Hypothesin *Newtonianam*, agitari debet Vibrationibus validioribus, quam quæ obtinent in Æthere rariore intra nervos concluso, easque adeo communicare particulis contiguis partium extremarum. Verum structura & dispositio papillarum nervosarum sentientium, pro causa primaria habendæ sunt; saltem in partibus nonnullis. Interim animadvertendum est, has papillas, cum assurgant ultra superficiem membranarum in quibus disponuntur, varie autem in variis locis, esse quasi partes extremas, atque idcirco, varios suos exquisitæ sensibilitatis gradus, a fonte jam enarrato derivare posse.

Densior Æther est itidem contiguus superficiei ventriculorum cerebri, interposita tantum membrana tenuissima; vel ne hac quidem, cum paulo densior sit Æther in interstitio hujus membranæ & substantiæ medullaris. Quæri itaque potest, annon hic densior Æther quiddam conferat sensationibus in universum augendis; annon sanguis, aut serum, in ventriculos effusum, easdem suffocet ob Vibrationes impeditas; denique annon cavitates, in nervis olfactoriis Brutorum quorumdam observatæ, partim in causa sint, quod hæc Bruta hominibus acutiora sint, in odoribus percipiendis & distinguendis.

Prop. 7.

Phænomena Somni videntur satis convenire Doctrinæ Vibrationum.

Primo; Somnus est status naturalis Fœtus in utero manentis, atque adeo Infantis etiam recens editi. Relabitur itaque in somnum cessantibus im-

pressionibus externis, ob cessantes itidem Vibrationes, per quas vigilia sustentatia fuit.

Secundo; Ipsi Adulti sunt magis proclives in Somnum, corpus suum ad quietem componendo, & objecta sensuum excludendo, ob easdem rationes. Dormiunt autem minus quam Infantes, tam propter minus laxam & magis actuosam naturam solidorum & fluidorum, Vibrationibus suscipiendis retinendisque aptiorem, quam propter jugem transitum Idearum, cum Vibrationibus annexis, de quo infra.

Tertio; durante Somno sanguis accumulatur in venis, & præcipue in sinubus venosis cerebrum & medullam spinalem circumcingentibus; plerumque etiam rarefit. Patent hæc ex natura quietis, sanguinis accumulationi in venis favente, ex calore & decubitu supino dormientium, & ex cadaverum dissectione post morbos soporosos. Credibile est igitur, naturam Somni in eo imprimis consistere, ut mollissima substantia medullaris, præcipue vero intra cranium, & thecam vertebrarum, comprimatur a corticali, & partibus vicinis; adeoque minus apta reddatur Vibrationibus suscipiendis, retinendis, & propagandis. Porro quæri potest, annon parietes oppositi ventriculorum cerebri, ad se invicem accedant invadente Somno, & tandem occupante, prorsus contigui fiant.

Quarto; Propensio in Somnum generatur a vigilia, laboribus, & dolore, *i. e.* a Vibrationibus, aut validis, aut diu continuatis. Hoc enim pacto, tum calorem generari, tum exilia substantiæ medullaris vasa suis liquidis & partibus actuosis privari, oportet. Substantia igitur medullaris reddetur compressioni magis obnoxia, ex hac causa duplici.

Quinto; Opiata videntur somnum inducere ratione sequenti. Opiatum primo excitat gratas, validasque Vibrationes in ventriculo, & intestinis. Ascendunt hæ jugiter ad cerebrum, ibique diffundunt

sese quaquaversum, atque ita porro descendunt per nervorum truncos. Impedient itaque ascensum Vibrationum excitatarum in partibus externis, simulque sensum voluptatis toti corpori impertientur. Componetur igitur corpus ad quietem, accumulabitur sanguis in venis, incalescent tam solida quam fluida, rarefient, & compriment substantiam medullarem. Nec prorsus incredibile est, Vibrationes ab opiato excitatas, post aliquod temporis spatium, propagari in partes heterogeneas nervis circumpositas, ibique Vibrationes confusas & irregulares ciere; donec tandem, harum reactione, ipsæ quasi suffocentur, partesque adeo externæ Sensui & Motui peragendis ineptæ reddantur.

In his omnibus notatu dignissimum est, quietem corporis omnimodam illi calefaciendo quam maxime conducere; atque e contrario, vel levissimos motus, subinde recurrentes, corpus ventilare & refrigerare.

Sexto; Chylificatio, sanguificatio, nutritio & incrementum, optime perficiuntur durante Somno; uti conjicere licet ex somnolentia omnium Animalium post pastum temporaria, & Infantium perpetua. Aucta enim tunc temporis respiratio, augendo impressiones alimenti in ventriculum & intestina, resuscitat Vibrationes ibi languescentes: Vigilant itaque organa digestionis & respirationis, suisque functionibus, *i. e.* chylificationi & sanguificationi, incumbunt, dum reliqua feriantur. Augeri autem videtur respiratio, partim ob cessationem Vibrationum in reliquis musculis, & in sensibus externis, partim ob auctam sanguinis calorem, & partim ob auctas impressiones alimenti in ventriculum & intestina, actione scilicet reflexa. Porro cum cerebrum, medulla spinalis & nervi, Vibrationibus fere vacent durante somno, liquet ea tunc impleri debere fluidis suis, adeoque nutritionem & incrementum simul optime perfici, tam ob hanc

causam, quam ob chylificationem & sanguificationem promotas.

Cor. Ex antedictis fortasse colligere licet, substantiam medullarem, instante Somno, non raro approquinquare solere ad statum inflammationi subtilissimæ proximum; hunc vero statum prohiberi, et substantiam medullarem pristinæ suæ integritati, & caloris gradui restitui, a Somno ad tempus idoneum protracto. Quæ quidem observatio non incommoda videtur, ad explicanda Symptomata quædam in Febrium insultibus, Phrenitide, Comate vigili, Mania, aliisque quibusdam morbis occurrentia. Sed hæc non sunt hujus loci.

Prop. 8.

Sensationes quævis, sæpius repetitæ linquunt post se quædam sui Vestigia, Typos, aut Imagines; quæ Ideæ sensationis simplices *vocari solent.*

Hæ Ideæ manifestissimæ sunt in oculo & aure, obscuriores in sensibus reliquis; pari ratione, ac brevis commoratio sensationum in Prop. 3tia memorata. Verum hic etiam concludere debemus de sensibus reliquis ex Analogia oculi & auris.

Prop. 9.

Vibrationes sensoriæ, sæpius repetitæ, generabunt in cerebro propensionem ad Vibratiunculas, respondentes sibi ipsis respective.

Per Vibratiunculas vibrationibus respondentes intelligo debiles Vibrationes, validioribus, ab objectorum actione excitatis, specie & loco similes.

Evincitur haec propositio ex præcedente. Cum enim Sensationes linquant Ideas, fieri non potest, quin Vibrationes illis respondentes, generent Vibratiunculas, quæ his pariter respondeant. Est etiam manifestum, diversas cerebri regiones præcipue affici debere ab his Vibratiunculis, prout objecta impressa fuerint in hunc, vel illum sensum

externum; adeoque Vibratiunculas etiam loco responsuras esse Vibrationibus generantibus. Sic Vibratiunculæ, generatæ ab impressione visibilium satis repetita, sedem suam præcipuam habebunt in thalamis nervorum opticorum, si modo nervi optici revera ducant originem suam ab his thalamis.

Verum operæ pretium erit hanc rem altius repetere, cum sit maximi momenti ad Doctrinas Vibrationum & Associationis elucidandas, & stabiliendas. Videamus itaque, annon hæc Propositio etiam deduci possit, ex ipsa Vibrationum, & Corporis Animati, natura.

Vibrationes aliquas extitisse in substantia medullari, dum Fœtus in utero manebat, necesse est, tum propter calorem hujus substantiæ, tum propter pulsum arteriarum ibi disseminatarum. Has *Vibrationes naturales* indigitare liceat. Infante in lucem edito, statim imprimuntur objecta externa, substantiam medullarem exagitantia Vibrationibus, ut ita dicam, *præternaturalibus;* quæ nimirum discrepant a naturalibus, & vi, & frequentia, simulque singularem aliquam regionem cerebri afficiunt: *i. e.* quæ discrepant a naturalibus, gradu, specie, & loco. Vocentur Vibrationes naturales *N*, præternaturales a primo objecto *A*, a secundo *B*, a tertio *C*, & sic deinceps. Imprimatur jam objectum primum prima vice, & dein, amoveatur: Patet ex natura Vibrationum, cerebrum non statim rediturum ad statum *N*, sed permansurum aliquamdiu in statu *A*, decrescente licet. Imprimatur idem objectum iterum iterumque; et tandem fiet, ut cerebrum non omnino rediturum sit ad statum *N*, sed permansurum in statu *A*, Vibrationibus licet imminutis, *i. e.* ad Vibratiunculas redactis; quas igitur per *a* denotare conveniet. Hoc autem fiet, eo quod particularum minimarum situs & actiones mutuæ accomodabuntur statui *A*, vel *a*, ab hoc ipso statu: ut

fit in chordis musicis tensis; hæ quippe, sive tendantur ultra, sive laxentur, ad tonum priorem semper vergunt. Interim hujusmodi propensiones longe potiori jure ascribendæ videntur Corporibus Animatis, & staturam nondum adeptis, quam aliis. Imo constat ex observationibus quam plurimis, hujusmodi propensiones a consuetudine generari in Corporibus Animatis, quicquid de earum causa, & generationis modo, statuatur. Jam itaque status *a* est quasi naturalis, & sustentabitur a calore substantiæ medullaris, & pulsu arteriarum ejus. Quod si et status *A*, & status *B*, impressi fuissent vicibus alternis, patet cerebrum pariter propensurum fore et ad *a*, & ad *b*; adeoque vel *a* vel *b* in eo obtinere debere, prout *A* vel *B* novissime impressus fuerit. Et simili ratione cerebrum propendere potest in plures Vibratiunculas *a*, *b*, *c*, &c. adeo ut harum quævis in eo obtineat propter novitatem impressionis, aliasve quaslibet causas; inter quas Associatio recenseri potest, uti mox docebitur. Vibrationes igitur *A*, *B*, *C*, &c. generare possunt propensionem in Vibratiunculas respondentes *a*, *b*, *c*, &c. uti affirmatum est in propositione.

Idem forsan ostendi potest ratione breviore, & paulo diversa. Fieri nequit quin impressiones variæ, sæpe repetitæ, prorsus obruant Vibrationes naturales. Interea cum nec calor substantiæ medullaris, nec pulsus arteriarum ejus, patiantur, ut Vibrationibus omnino destituatur, necesse est Vibratiunculas, respondentes impressionibus externis, tanquam causis generantibus, in ea semper existere. Erunt autem hæ Vibratiunculæ admodum complexæ propter combinationes varietatum gradus, speciei & loci. Durante impressione quavis, & per breve intervallum postea, obscurabuntur debiles quotcunque Vibrationes, *i. e.* Vibratiunculæ, a Vibrationibus huic impressioni proprius. His cessantibus, pars alia, atque deinceps alia, complexarum Vibratiun-

cularum, inter cæteras maxime eminere potest, Ideamque sibi respondentem Animæ exhibere; eadem fere ratione, ac cum diversa instrumenta musica pulsantur, nunc hoc, nunc illud, Auditorem maxime percellit. Desideratur tantum levis aliqua causa, quæ faciat ut substantia medullaris ad has partes Vibratiuncularum complexarum vergat successive. Associationem autem talis causæ officio defungi posse, monstrare conabor in duabus propositionibus proximis. Sed & variatæ conditiones solidorum & fluidorum bene multæ, ex ipsa Corporis Animati natura successive provenientes, idem præstare posse videntur.

Si concedatur, hanc propositionem evinci posse ex natura Vibrationum & Corporis Animati, propositio præcedens inde derivari queat; pertinebitque non minus ad tactum, gustum, & olfactum, quam ad visum, & auditum.

PROP. 10.

Sensationes quævis A, B, C, *&c. sibi mutuo associatæ vicibus satis repetitis, ejusmodi imperium obtinent in Ideas respondentes* a, b, c, *&c. ut Sensationum unaquæque* A, *seorsum impressa, reliquarum Ideas,* b, c, *&c. in Anima excitare valeat.*

Sensationes dicuntur associari sibi mutuo, quando earum impressio est vel synchronica, vel etiam successiva brevissimo intervallo.

Constat propositio ex observationibus frequentissimis, & maxime pervulgatis. Verum notandum est, vim Associationis non obtinere in impressionibus successivis secundum ordinem retrogradum. Si utique *A, B, C,* sint impressiones sæpe associatæ secundum ordinem Alphabeti; *B,* seorsum impressa, non excitabit *a,* sed tantum *c.* Est etiam notandum in Associationibus utrisque, impressiones justo plures non esse debere.

PROP. 11.

Vibrationes quævis A, B, C, *&c. sibi mutuo associatæ vicibus satis repetitis, ejusmodi imperium obtinent in Vibratiunculas respondentes,* a, b, c, *&c. ut Vibrationum unaquæque* A, *seorsum excitata, Vibratiunculas reliquis respondentes* b, c, *&c. excitare valeat.*

Hæc propositio respondet præcedenti, eodem modo quo 4ta. & 9na., 3tiæ. & 8væ. respective; adeoque ex ea pariter deduci queat.

Verum sequi etiam videtur ex natura Vibrationum & Corporis Animati. Sint *A* & *B* duæ Vibrationes synchronice associatæ. Liquet itaque Vibrationem *A* (loqui enim liceat de *A* & *B* tanquam de Monadibus) sese diffundendo in partes cerebri, ubi Vibratio *B* sedem suam præcipuam habet, debere modificare, & aliquo modo mutare Vibrationem *B*; & versa vice, *B* modificabit & mutabit *A*. Fiat hoc millies, & tum demum excitetur Vibratio *A* seorsum. Jam vero paulum diversa erit a Vibratione, quam idem objectum excitasset, si prægressa fuisset impressio ejus solitaria, millies repetita; vergetque ad modificationes a *B* inductas; id adeo propter propensionem Corporis Animati in statum quemvis sæpius recurrentem, de qua supra. Multo itaque magis Vibratio *A*, sic modificata, cum venerit ad sedem ipsius *B*, verget ad *B*, *i. e.* excitabit *b*. Et pari ratione *B*, seorsum excitata, excitabit *a*.

Quod si *A* & *B* sint Vibrationes successivæ, manifestum est posteriorem partem, sive statum decrescentem, ipsius *A*, modificari & mutari debere a *B*, & tandem in *B* desinere. Simili igitur ratiocinio colligere licet, Vibrationem *A*, post associationes satis repetitas, habituram esse vim excitandi *b*. Verum *B* non excitabit *a*, cum ejus status decrescens non desinit in *A*, sed in aliam aliquam Vibrationem, *C* puta, vel *D*.

Inferri quoque potest hæc propositio a 9na. Cum enim Vibrationes *A* & *B* excitentur simul, coalescent in unam quasi Vibrationem, atque hæc Vibratio generabit Vibratiunculam per prop. 9nam.; quæ, pari ratione atque ipsa Vibratio generans, pro Monade haberi debet. Recurret etiam identidem per eandem propositionem ex causis levibus. Multo itaque magis recurrere potest pars ejus *b*, quando ipsius Vibrationis generantis pars *A* excitatur.

Imo dici potest, nec quidem reticeri debet, facultatem Associationis omnino egere facultate generandi Ideas & Vibratiunculas, atque eam, tanquam prævium Postulatum, supponere. Etenim nec Ideæ, nec Vibratiunculæ, ab associatione excitari possunt, nisi prius generentur. Et vicissim facultas generandi Ideas & Vibratiunculas, omnino eget facultate Associationis. Qui enim fieret, ut Sensationes generarent Ideas, vel Vibrationes Vibratiunculas, nisi Sensationum & Vibrationum partes, respectu loci & temporis infinite divisibiles, cohærerent inter se ob simultaneam impressionem, *i. e.* Associationem? Opus est porro Associatione, tanquam causa, quæ faciat ut cerebrum huc illuc propendeat successive, *i. e.* ut Vibratiuncularum valde complexarum, in prop. 9na. memoratarum, pars alia, atque deinceps alia, inter cæteras maxime emineat. Neque limes aliquis certus figi queat, intra quem sistatur hæc mutua implicatio. Verum si detur vel minimum punctum stabile in harum facultatem utravis, non incredibile videtur totum, quantumcunque fuerit, Systema Idearum & Associationum illi, tanquam fundamento, inædificari posse. Interea, hæc mutua implicatio, cum non sit Doctrinis Vibrationum & Associationis propria, sed ubique occurat, uti supra innui, censenda est illis fidem addere potius, quam detrahere. Admodum subtilia sunt hæc & obscura, neque tamen ipse meliora ha-

beo, quæ proferam. Proferentur autem posthac ab harum rerum studiosis, ni multum fallor.

PROP. 12.

Ideæ simplices coibunt in complexas per Associationem.

Patet tam ex præcedentibus, quam ex observationibus innumeris. Illustratur autem exemplo literarum, quæ coeunt in syllabas & voces, & coeundo uniuntur quasi inter se.

Cor. 1. Si magnus fuerit numerus Idearum simplicium componentium, fieri potest ut Idea complexa nullam cum his Ideis, vel sensibus externis respondentibus affinitatem præ se ferat; eodem plane modo, ac Pharmacum valde compositum non redolet quodvis e suis Ingredientibus simplicibus; aut colores primarii, in luce Solari, objectove albo, sibi invicem commixti, seorsum discerni non possunt.

Cor. 2. Hinc quasi per nebulam conspici queat, qua ratione tota supellex Idearum complexarum, quæ excitantur a vocibus diversarum linguarum, objectis visibilibus, &c. in quotidianis vitæ negotiis, & sese continua serie excipiunt, secundum objectorum actiones, & Idearum Associationes, simul sumptas, resolvi tandem aliquando possit in partes suas simplices componentes.

Cor. 3. Ideæ complexæ coibunt in decomplexas, ut ita dicam, pari ritu ac voces coeunt in Sententias. Sed nexus erit laxior plerumque inter Idea complexas, decomplexam quamvis componentes, quam inter partes simplices Idearum complexarum; prorsus ut in exemplo adducto, sententiarum voces sibi invicem minus arcte cohærent, quam vocum ipsarum syllabæ, vel literæ.

Cor. 4. Assensus & dissensus sunt nil nisi Ideæ decomplexæ, a propositionibus excitatæ.

PROP. 13.

Vibratiunculæ simplices, gradu, specie, & loco respondentes Ideis simplicibus, complexam quamvis componentibus, comitabuntur hanc Ideam complexam, & coibunt in Vibratiunculam unam pariter complexam.

Hæc propositio analoga est 4tæ. 9næ. & 11mæ.

PROP. 14.

Fieri potest, ut nonnullæ ex his Vibratiunculis idealibus compositis, æque validæ sint, ac Vibrationes sensoriæ, ab ipsa objectorum actione excitatæ.

Numerus enim & actio mutua partium componentium, potest compensare defectum virium in singulis, & Vibratiunculas ad Vibrationes evehere.

Cor. 1. Ex hoc fonte peti debet origo Voluptatum & Dolorum intellectualium. Namque hi nihil aliud sunt, nisi Ideæ complexæ & decomplexæ, præter solitum vividæ.

Cor. 2. Manifestum est Voluptates & Dolores intellectuales fiere posse majores, æquales, vel minores Voluptatibus & Doloribus sensibilibus, pro vario scilicet numero & magnitudine Vibratiunculorum, vel Idearum, componentium.

Cor. 3. Sint *a*, *b*, *c*, *d*, *e*, &c. Voluptates sensibiles; *x*, *y*, *z*, Dolores sensibiles, nimirum tres tantum numero; & ponatur, Voluptates singulas et sibi mutuo, & Doloribus singulis æquari. Associentur jam Voluptates & Dolores inter se secundem omnes varietates possibiles: patebitque, Dolorem superatum iri a Voluptate in combinationibus literarum septem vel plurium; adeoque nil nisi puram Voluptatem intellectualem superfuturam in his combinationibus universis, quam primum singularum partes componentes integre coaluerint, Associationibus satis repetitis. Et par erit conclusio in aliis casibus, si modo quantitas Voluptatis sensibi-

lis, ex numero & magnitudine Voluptatum singularium conflata, major sit, quantitate Doloris sensibilis, simili ratione in unum collecti.

Cor. 4. Si Entia ejusdem naturæ, sed impræsentiarum dissimilia, subjiciantur iisdem objectis & Associationibus per tempus indefinitum, fient tandem magis similia, quam pro data quavis discrepantia.

Cor. 5. Patet Vibratiunculas omnes ideales sedem suam habere in cerebro, vel etiam in penetralibus ejus intimis. Est igitur cerebrum quasi Sedes Animæ rationales, *i. e.* Animæ ipsius humanæ, quatenus ratiociniis, & motivis, quod aiunt, moralibus afficitur.

Prop. 15. §

Credibile est Motum muscularem perfici eadem ratione generali, qua Sensatio & Idearum perceptio.

Hoc enim sequi videtur, tum ex mutuo eorum nexu, (scilicet Motus automatici cum Sensatione, voluntarii cum Ideis; de quo nexu infra) tum ex uniformitate & continuitate Substantiæ medullaris, quæ est commune instrumentum Sensationum, Idearum & Motuum, secundum Prop. 1mam. & 2dam.

Per Motum automaticum, volo illum qui fit a mechanica actione partium corporis; per voluntarium, illum qui fit ab imperio voluntatis, vel Animæ rationalis.

Cor. 1. Si itaque ostendi possit Sensationem peragi ope vibrationum, peragetur etiam Motus muscularis eodem artificio; & versa vice.

Cor. 2. Experimenta, quibus ostenditur Motum muscularem languescentem renovari posse a calore, impulsu & puncturis; contractiones item et dilatationes alternae cordum Ranarum, Viperarum, &c. corporibus exemptorum, innuere videntur, Motum muscularem pendere ab agitationibus subtilibus

in particulis minimis fibrarum muscularium, *i. e.* a Vibrationibus. Accedit igitur nonnihil lucis & ponderis Vibrationibus sensoriis, supra expositis, ex his Phænomenis. Ratio eorum aliquo modo enarrabitur infra.

Cor. 3. Vix concipi potest quævis motus species, vibratoria excepta, quæ propagari possit illibata, per mollissimam substantiæ medullaris pulpam, ab organis sensoriis usque ad motoria; sicut fit in Motibus tum automaticis, tum voluntariis. Unde sequitur & Sensum & Motum peragi debere ope vibrationum.

Prop. 16.

Phænomena musculorum contractorum satis quadrare videntur cum Doctrina Vibrationum.

Ponatur Vibrationes descendere per nervos, tanquam per totidem vias regias, versus fibras musculares; eadem fere ratione, ac soni decurrunt, vix imminuti, per superficiem aquæ quiescentis, vel virtus electrica per funiculos cannabinos. Agitent porro hæ Vibrationes particulas minimas fibrarum muscularium; atque vim attractivam, fortasse generis electrici, latentem in iis, præcipue vero in globulis sanguineis, secundum Observatum *Cl. Halesii*, in actum deducant. Hinc fiet, ut unaquæque fibra, atque adeo totus musculus, brevior reddatur, magnitudine interim non multum imminuta. Neque repugnare videtur hæc Hypothesis suspicioni, admodum probabili, a *Cl. Pembertono* motæ, de contractionibus musculorum a causa cohæsionis corporum aucta deducendis.

Fieri etiam potest fortasse, ut fibrillæ minimæ inflectantur hinc inde, anguillæ ritu, flexuris minimis, sicut suspicatur *Lowerus*, & ut contractio peragatur has flexuras augendo, relaxatio eas minuendo. Annon rugæ a *Leeuwenhoekio*, aliisque, visæ

in fibris muscularibus, itemque rhomboidales pinnulæ ab *Halesio* in musculis abdominalibus Ranæ viventis contractis, huic positioni favent?

PROP. 17.

Propensio, quæ observatur in musculis fere omnibus, ad contractiones & relaxationes alternas, deduci potest a Doctrina Vibrationum.

Contractis enim fibris muscularibus, cohibeantur oportet Vibrationes partium minimarum a duritie inducta; minuetur ergo causa attractionis auctæ, atque adeo ipsius contractionis. E contrario relaxatis fibris, Vibrationes per nervos descendentes, in has libere propagabuntur; redibit itaque causa attractionis auctæ, atque adeo ipsius contractionis. Elongatio porro, *i. e.* extensio, fibrarum relaxatarum, nec non descensus Vibrationum in Antagonistam contractum impeditus, nonnihil conferre possunt ad Vibrationes in musculo relaxato augendas; saltem in motibus membrorum, & actione Respirationis, ubi musculi sibi invicem Antagonistæ sunt.

PROP. 18.

Vibrationes sensoriæ, supra expositæ, suppeditare possunt Vibrationum motoriarum copiam sufficientem ad contrahendos musculos.

Origines Vibrationum motoriarum ad quinque classes rediri possunt.

Primo utique concipi potest, Vibrationes in Sensibus excitatas ascendere per nervos sensorios, donec perveniant ad truncum his nervis cum nervis motoriis communem; aut ad plexum nerveum, vel ganglion, e quo nervi motorii oriuntur. Hoc peracto, pars Vibrationum descendet per nervos motorios, motum in musculis vicinis excitatura; atque idem fiet iterum iterumque, per totum decursum nervi ad cerebrum.

Secundo; Pars residua quæ pervenit ad cerebrum, sese diffundet undique, adeoque dimittet quasdam Vibrationes debiliores, versus totum Systema musculorum.

Tertio; Calor saguinis, & pulsus arteriarum, semper cient quasdam Vibrationes, in cerebro, quæ itidem semper decurrunt versus totum Systema musculorum.

Quarto; Vibrationes, in membranis uniformibus excitatæ, propagantur undique per harum superficiem, & non parum conferre videntur ad Motus in musculis vicinis generandos. His in casibus, verisimile est Vibrationes perpetuo augeri, donec tandem pares evadant fibris membranæ affectæ valide contrahendis. His contractis, cessant illico Vibrationes in particulis earum minimis. Augetur itaque Vibrationum propagatio in musculos vicinos, tum ob hanc causam, tum fortasse propter extensas quasdam fibras nerveas, durante membranæ contractione; atque ita paulo post, se fortiter contrahunt musculi vicini. Exemplum habetur in Sternutatione.

Quinto; Si Vibrationes cessent, vel admodum langueant, ob quamvis aliam causam, a jam memorata diversam, in notabili aliqua corporis parte, probabile est, cæteris manentibus, eas in reliquis auctum iri. Patet, ut videtur, in dormiturientibus, epilepticis, & moribundis.

Prop. 19.

Motus automatici non incommode explicari posse videntur, ope trium propositionum proxime præcedentium.

Res est admodum obscura & implexa, præsertim in casibus quibusdam. Proponam pauca, quæ speciem veri præ se ferunt.

Motus cordis deducendus est a 2a. & 3a. classe Vibrationum motoriarum, cum causis propensionis

musculorum in contractiones alternas collatis. Multum etiam tribuendum est influxui tum sanguinis venosi in ventriculos cordis, tum arteriosi in arterias coronarias.

Annon conjicere licet ex *Hookiano* experimento (in quo nimirum vita canis sustentata fuit a jugi fluxu aeris per pulmones sine alterno motu respirationis) usum præcipuum Aeris, qui est inter corpora *electrica per se*, esse, ut restituat sanguini per pulmones fluenti vim electricam, deperditam circulando per corpus: atque hanc restitutionem necessariam esse ad motum cordis sustentandum in Animalibus perfectioribus?

Corda Ranarum, Viperarum, &c. censenda sunt donari durabiliori vi attractiva (sive sit electrici generis, sive alius cujuspiam) quam cor humanum; irritari etiam posse a calore minori.

Respiratio et vagitus in recens natis cientur a frigore impresso, contrectationibus Obstetricis, aliisque vividis Sensationibus, statim a partu excitatis. Si enim musculi omnes, ad truncum corporis pertinentes; simul agant, consequetur irregularis quædam respiratio, cum vagitu, ex eorum Antagonismo inter se. Respiratio postea sustentatur, partim a propensione ad motus alternos in Prop. 17ma. exposita; partim autem, ut videtur, a vibrationibus in pleura & peritonæo excitatis, ac dein communicatis diaphragmati, musculisque thoracis & abdominis. Sic respiratione cessante ob cursum, nixumve quemlibet validiorem, augentur vibrationes in extima pulmonum membrana, *i. e.* in pleura, tum ab aucto Sanguinis calore, tum ab ejus accumulatione in pulmonibus; et auctæ, propagantur in diaphragma & musculos intercostales.

Motus peristalticus intestinorum, cum sit reciprocus & perpetuus, sine musculorum Antagonismo, simili fere ratione explicandus est, ac Motus cordis. Verum impressiones, in tunicam villosam

factæ ab alimentis, bile & fæcibus, magnam quoq; vim habent; Vibrationes porro ab his excitatæ decurrunt per superficiem tunicæ villosæ internam, tam sursum, quam deorsum. Fibræ intestinorum pallidæ retinent facultatem sese contrahendi & laxandi, per aliquod tempus post mortem; fortasse ob easdem causas, quæcunque demum sint, ac musculi Animalium quorundam frigidorum, & prorsus, vel fere, exsanguium.

Sternutatio, Deglutitio, Tussis, Singultus, Vomitus, Expulsio fæcum intestinalium & urinæ, cum aliis quibusdam Motibus ejusdem generis, derivari possunt a 1ma. & 4ta. classe Vibrationum motoriarum. Multum favet Hypothesi hic expositæ, omnes hujusmodi motus cieri in vicinia Sensationum vividarum, iis auctis augeri, imminutis imminui. Sequi videtur ex ea, Deglutitionem peragi debere methodo a *Cl. Albino* descripta. Porro in expendenda Sternutatione, Deglutitione & Tussi, ratio est habenda extremitatum nasi, uvulæ, & epiglottidis, tanquam partium acuminatarum.

Membrorum Flexiones & Extensiones lenes se invicem excipere debent, in Infantibus recens natis, serie successiva, & quodammodo regulari, uti fit, ob classem 2dam, & 3am. Validi autem membrorum Motus excitantur, a frictione cutis, torminibus ventris, aliisque sensationibus vividis; Vibrationibus utique a 1ma, & 4ta. classe derivatis.

Sic etiam Oscitatio & Pandiculatio oriri videntur a classe 1ma, & 4ta; forte etiam a 5ta, in casibus nonnullis. Oscitatio autem videtur deberi præcipue contractionibus in membrana oris, faucium, asperæ arteriæ, & œsophagi; Pandiculatio, contractionibus in tota simul cute externa.

Verisimile est Glandularum ductus secretorios & excretorios semper contrahi & laxari alternis vicibus, motu quodam peristaltico, a classe 2da, & 3a,

nato. Sed agitantur multo magis, in irritationibus membranum vicinarum, a Vibrationibus, quæ decurrunt per harum superficies, & penetrant ostia ductuum excretoriorum. Quinetiam, et vasa inhalantia, & exhalantia, functionibus suis apta reddi, ex iisdem causis, non est vero absimile.

Motus oculorum tum externi, tum interni, videntur satis congruere cum Analysibus jam traditis. De contractione annuli majoris uveæ, & ligamenti ciliaris, omnino consulendus est *Cl. Jurinus.*

Contractiones musculorum laxantium membranam Tympani, oriuntur forsan a validioribus agitationibus aeris in sonis fortioribus. Hi enim musculi videntur magis exponi agitationibus Aeris, quam musculus internus, aut musculus stapedis.

Est autem animadvertendum, me hic verba facere, de statu mere automatico horum omnium Motuum. De statu voluntario et semivoluntario mox dicetur.

PROP. 20.

Quæcunque de ortu Vibratiunctularum idealium a Vibrationibus sensoriis, earumque Associatione, supra traduntur, non injuria applicari possunt ad Vibrationes & Vibratiunculas motorias.

Sequitur statim ex concessis Vibrationum & Associationis Doctrinis, quales in præcedentibus sistuntur.

Cor. 1. Vibrationes igitur motoriæ generabunt Vibratiunculas respondentes sibi ipsius respective.

Cor. 2. Hæ Vibratiunculæ motoriæ sedem suam habebunt in cerebro. Propagantur enim in cerebrum, ibique quasi habitant Vibrationes omnes sensoriæ, a quibus Vibrationes & Vibratiunculæ motoriæ derivantur.

Cor. 3. Vibratiunculæ motoriæ sibi mutuo

cohærebunt per Associationes, tum synchronicas, tum successivas; atque hinc originem dabunt Motibus complexis & decomplexis.

Cor. 4. Eædam Vibratiunculæ motoriæ cohærebunt Vibratiunculis idealibus per Associatonem; adeoque excitabuntur ab his, & excitatæ musculis contrahendis pares erunt, quam primum fibræ musculares sat roboris, & sanguinis, virtute activa donati, adeptæ fuerint.

Cor. 5. Si Vibratiunculæ ideales adeo augeantur, secundum propositionem 14^tam^, ut æquales evadant Vibrationibus sensoriis, expectari potest, ut Vibratiunculæ motoriæ similiter augeantur; atque idcirco, ut musculi ab iis contrahantur, eadem vi, atque in statu automatico.

Cor. 6. Vibratiunculæ motoriæ cohærebunt etiam Vibrationibus sensoriis alienis, quæ nimirum in his Vibratiunculis motoriis primitur generandis nullam partem habuere. Unde sequitur, motum quemvis muscularem excitari posse a Sensationibus, cum quibus nullus illi intercedit nexus naturalis, & originalis.

Cor. 7. Summa conjuncta omnium, quæ de Associatione jam tradita sunt, sic enuntiari potest. Sensatio quævis *A*, vel Idea *B*, vel Motus muscularis *C*, si associetur vicibus satis repetitis cum Sensatione quavis alia *D*, Idea *E*, vel Motu musculari *F*, tandem excitabit Sensationis *D*, Ideam *d*, ipsam Ideam *E*, vel ipsum Motum muscularem *F*.

PROP. 21.

Motus voluntarii & semivoluntarii debentur Associatoni, methodo in propositione præcedente enarrata.

Si quis enim diligentius perquirat quibusnam Sensationibus, Ideis & Motibus, Motus quivis in corpore humano associentur, quanta cum frequentia, & an laxiore, an strictiore vinculo, pro varia

scilicet Vibrationum vi, cernet omnia respondere Hypothesi propositæ, quantum in re tam difficili, novaque, expectari æquum est. Apparebunt utique causæ sufficientes, propter quas, alii ex motibus automaticis fiant tandem omnino voluntarii, alii tantum ex parte, atque alii demum vix ullam mutationem patiantur, per totum vitæ curriculum. Patebit etiam, Motus voluntarios quotidie peractos, rursus in automaticos transmutari debere; adeoque Motus hujusmodi bis transire per statum semivoluntarium. Porro inhiberi possunt & sisti Motus quivis voluntarii, eadem ratione, qua excitari; nimirum per Associationem debilium Vibrationum in musculis ipsis, vel validarum in eorum Antagonistis, cum Ideis requisitis. Denique Associationis vis etiam ad Motus cordis, intestinorum, et musculorum respirationi inservientium, aliquo modo pertingere videtur, & nonnihil conferre ad eos sustentandos. Credibile est saltem, Motus cordis & intestinorum irregulares, a causis validis primum ortos, tandem recurrere solere ob causas leviores, eadem fere ratione, ac Motus automatici fiunt tandem voluntarii. Et idem obtinere videtur in paroxysmis hystericis & epilepticis.

Non abs re erit hic apponere exempla quædam duplicis transmutationis Motuum animalium, automaticorum scilicet in voluntarios, et voluntariorum in automaticos.

Flectuntur digiti in recens natis, ab omni fere impressione in volam facta. Hinc fit, ut manu comprehendant objecta ei immissa. Actione hac automatica sæpius recurrente, contrahuntur digiti, post aliquod tempus, a causis levibus associatis, aspectu, puta, rei optatæ, & manu comprehendi solitæ. Idem dein præstant sonus vocum, hanc actionem denotantium, auribus impressus, aspectus manus nutricis contractæ, Idea hujusmodi, & innumera alia Adjuncta associata, subtiliora quam quis, in

hisce rebus minus curiosus, facile crediderit. Et sic demum actio manu comprehendendi fit perfecte voluntaria; excitari nimirum potest a minimo nutu voluntatis, ope levissimorum Adjunctorum associatorum. Peragitur etiam frequentissime, prorsus sine conscientia, vel nutu voluntatis, *i. e.* automatice; nisi quis malit evanescentem nutum hic supponere; minorem scilicet, quam ut memoria eum assequatur.

Recens nati sonum non edunt, nisi dolentes. Progressu temporis excitur hæc actio a voluptate, & tandem a Sensationibus adiaphoris, & causis levibus associatis. Circa idem tempus, musculi, loquelæ destinati, cientur in actiones complexas. Ex fortuito concursu actionum duplicis hujus generis, formatur subinde sonus articulatus, articulatove propinquus; recurritque sæpius ex causis jam notatis. Recurrit vero postea, ex impressione soni hujus in aurem Infantis facta, tanquam Adjuncto associato; idque sive ab ipso Infante sonus hic edatur, sive a nutrice & astantibus. Atque hinc colligere licet, sonos quosvis articulatos, ab Infante fortuito primum editos, sæpius ab eo iterari debere, dum inarticulati exolescunt; nimirum, eo quod soni inarticulati raro, vel nunquam. Tandem Infans se protinus accinget ad pronuntiandum, ex audita voce aliorum, aspectu rerum familiarium vel characterum, multisque aliis ejusmodi; & sic porro, donec loquela sit primo perfecte voluntaria, & deinde redeat, in casibus bene multis, ad statum quasi automaticum.

Patet vero ex jam tradita actionum manu comprehendendi, & loquelæ, Analysi, qua ratione prima fundamenta facultatis imitatricis, in Infantibus adeo conspicuæ, jaciantur. Cum enim Infantes ut plurimum videant actiones, quas peragunt, et semper audiant sonos, quos edunt, manifestum est as-

pectum actionum, & auditum sonorum, numerandos esse inter præcipua Adjuncta associata, ad agendum & pronuntiandum incitantia, uti supra monui; sive, quod idem est, Infantes imitari debere aliorum gestus visos, & voces auditas.

Simili methodo explicare licet imperium satis notabile, quod voluntas habet in Deglutitionem, Respirationem, Tussim, & Expulsionem urinæ & fæcum; debile vero et obscurum, vel nullum, in Sternutationem, Singultum, Vomitum, Motum cordis, & Motum peristalticum intestinorum.

Discentes pulsare instrumenta musica, primo movent digitos actione voluntaria, connectentes interea Ideas, imperiaque Animæ, hos motus lente excitantia, cum aspectu characterum musicorum. Continuato hoc processu, accedunt indies, propius propiusque ad se invicem, motus digitorum, & impressiones characterum, & tandem, Ideis & imperiis Animæ in infinitum quasi diminutis, coalescunt. Fidicen igitur peritus chordas digitis percurrit citissime, & ordine justo, ex mero aspectu characterum musicorum, animo interim alienis cogitationibus intento; atque proinde characteres musici idem illi præstant officium, ac Sensationes impressæ recens natis, in motibus eorum automaticis. Migrant itaque ope Associationis tam Motus voluntarii in automaticos, quam automatici in voluntarios. Patetque ex hac propositione & 19na, simul collatis, Doctrinam Associationis pari ratione inservire Motibus voluntariis, semivoluntariis, & automaticis secundi generis, explicandis, ac Doctrina Vibrationum Motibus automaticis originalibus. Infinita restant quærenda & discutienda. Tentando probet Lector, quid, ad utrumque Problema resolvendum, valeat Hypothesis hic proposita. Advertat autem, statum mere automaticum vix inveniri, nisi in Motibus Infantium recens natorum, & iis qui a Dolore, vel Irritatione vehemente, excitantur.

Cor. 1. Cerebrum est quasi Sedes Animæ, quatenus Motibus voluntariis præsidet.

Cor. 2. Hypothesis hic proposita e directo opponitur Hypothesi *Stahlianorum;* secundum quam nimirum, universi Animalium Motus pro voluntariis habendi sunt, in statu suo primo. Conveniunt tamen de cognatione inter Motus voluntarios & involuntarios; ut etiam de transitu (sive potius reditu, secundum hanc Hypothesin) Motuum voluntariorum in involuntarios. Causas equidem finales ubique locum habere in corpore humano, sicut *Stahliani* asserunt, non est dubitandi locus; utilissimæ quoque sunt ad efficientes indagandas. Verum pro efficientibus substitui non debent; neque harum investigatio a Medicina ablegari; cum in eas solas Medici imperium, qualecunque sit, exeratur. Quid? quod causæ efficientes sint pariter utiles ad finales eruendas; uti vel ex hac Hypothesi patere queat.

Cor. 3. Iuvabit forsan conferre cum hac Hypothesi, et *Cartesianam*, & *Leibnitianam*, de Motibus Animalium, commercioque Animæ cum Corpore. Earum utraque subtiliter quidem excogitata fuit, ad effugiendas Objectiones, quibus premitur Systema scholasticum influxus physici Corporis in Animam, Animæque in Corpus; quod idem fieri videtur etiam ab hac Hypothesi. Est vero credibile, magnos progressus in his rebus fieri potuisse a tantis Viris, si his temporibus viguissent, & medicinæ faciendæ animum adjunxissent.

Cor. 4. Non absonum erit hic apponere *Newtoni* verba de Sensatione, & Motu voluntario, sicut habentur ad finem Principiorum: cum et originem dedere huic Hypothesi, & ab ea fluant tanquam corollarium. Asserit utique, " Vi & actionibus spi-
" ritus cujusdam subtilissimi, et Sensationem om-
" nem perfici, & membra Animalium ad voluntatem

" moveri; Vibrationibus scilicet hujus spiritus, per " solida nervorum capillamenta, ab externis sen- " suum organis ad cerebrum, & a cerebro in mus- " culos propagatis."

Cor. 5. Generari oportet indies imperium voluntarium, & semivoluntarium, in Ideas & affectus animi. Sequitur ex proposita Analysi Motuum voluntariorum, et semivoluntariorum. Experimur autem quotidie, scilicet in attentione voluntaria, recordatione activa, commotione, vel cohibitione, affectuum semivoluntaria, & excitatione motivorum moralium omnino voluntaria.

Cor. 6. Congruentia Doctrinarum Vibrationum & Associationis, & cum se mutuo, & cum tot Corporis & Animæ Phænomenis, pro veritatis argumento validissimo haberi debet.

Prop. 22.

Sequitur ex Hypothesi proposita, facultatem Voluptatis consequendæ, & Doloris amovendi generari debere in Infantibus recens natis, & dein indies increscere.

Motus enim qui Voluptatis consecutioni, & Doloris amotioni præcedunt & famulantur, multo, frequentiores erunt a primo partu, quam qui Dolorem inferunt; crescetque illorum numerus indies, dum hi inhibentur. Hoc autem ostendi potest argumentis sequentibus.

Primo; Voluptates sunt multo numerosiores, quam Dolores. Erunt igitur motus illis famulantes perinde numerosiores.

Secundo; Voluptatum Adjuncta associata sunt longe plura, quam ipsæ Voluptates; hæc autem Adjuncta eosdem motus ciere valebunt, post Associationes satis repetitas. Unde admodum augebitur numerus Motuum Voluptati ministrantium.

Tertio; Favet insuper huic positioni, quod

motus Voluptati ministrantes sint modici; adeoque a causis tum automaticis, tum voluntariis, cieri possunt faciliori negotio.

Quarto; E contrario Dolores, & proinde Motus annexi, sunt rari & vehementes. Quinetiam hi Motus sunt varii; atque idcirco stabili Associatione objectis & Ideis uniri nequeunt; &, quod præcipuum est, desinunt tandem, ex ipsa fabrica corporis, in illam Motus speciem, quæ Dolori amovendo, aut leniendo, maxime conducit. Hæc itaque species, cum recurrat frequentius cæteris, & diutius permaneat, ulterius confirmabitur a vi Associationis.

Cor. 1. Propensiones bene multæ Infantium, satis difficiles explicatu secundum Hypotheses receptas, ex his fontibus deduci possunt. Sunt tamen nonnullæ, quæ præcociores esse videntur, quam ut huc referantur.

Cor. 2. Quin et propensiones valde complexæ Adultorum, quibus sibi ipsis consulunt, modo tum explicito, tum implicito, ex iisdem, vel saltem ejusmodi principiis, solvi posse videntur.

Cor. 3. Ex causis porro similibus nascetur propensio illa ad Ideas, & affectus animi, gratos excitandos, & fovendos, quæ frequentissime observatur. Recurrent interea ingrati ob alias causas permultas: inter quas substantia medullaris, morbosa indole laborans, non infimum locum obtinere videtur.

Cor. 4. Cum Deus sit fons omnis boni, sequi videtur, etiam ex hac propositione, Ideam Dei, modorumque, quibus infinita ejus bonitas & perfectio manifestantur, tandem absorpturam omnes alias Ideas, Ipsumque adeo futurum *omnia in omnibus.*

Cor. 5. Sistuntur in hac propositione, & corollariis ejus, nova uti credo, certe generalissima, exempla coincidentiæ causarum efficientium cum finalibus.

Scholium Generale.

Usus Doctrinæ Vibrationum late patere videtur in re medica. Namque sine ea, modo vera sit, omnino manca & imperfecta erunt, quæ de cerebri & nervorum muniis traduntur. Cerebrum vero, & nervi, sunt partes non minus principales Corporis Animati, quam cor & vasa sanguifera. Nervi enim per totum corpus dispertiuntur, non minus quam vasa sanguifera; &, quod valde mirandum, hæ partes tum reliquas, tum se invicem, constituere videntur: nisi potius censendum sit, extare materiam aliquam originalem, specifice modificatam, in quavis corporis parte. Nec minus illustrari potest Pathologia cerebri, sive Phænomena morborum capitis, ab hac doctrina, quam cerebri Physiologia. Nonnulla etiam ad Therapeiam hic rite instituendam, ab eadem Doctrina fluere videntur. Et par est ratio morborum spasmodicorum: quanta autem sit horum Seges, nuper optime docuit *Fr. Hoffmannus*. Actio venenorum quorundam, primo in ventriculum & intestina, deinde in totum genus nervosum; effectus item morsuum & ictuum venenatorum, & Torpedinis, cum aliis quibusdam hujusmodi, generalem & imperfectam quandam Solutionem admittunt a Doctrina Vibrationum: nempe, eo quod hæ causæ morbificæ Vibrationes violentas, confusas, & a tenore Vibrationum, per quas Sensus & Motus peraguntur, prorsus alienas generent. Rectissime enim monet *Cl. Meadus*, effectus venenorum longe potiori jure referri debere ad nervorum systema læsum, quam ad sanguinem. Quin et Doctrina Associationis, præsertim si in coalescentia Vibrationum fundari supponatur, utilis esse potest ad Medicum ducendum, tramite paulo rectiore & expeditiore, per Labyrinthos morborum, ubi Corpus & Anima simul laborant, & se mutuo male afficiunt.

Phænomena Memoriæ & Insomniorum magna ex parte deduci possunt a conjunctis Doctrinis Vibrationum & Associationis. Ratiocinatio etiam Brutorum imperfecta cum illis satis quadrat. Nec omnino inutiles videntur, ad enodandum difficillimum illud de Brutorum instinctibus Problema.

Doctrina porro Associationis ad veram Logicen condendam omnino necessaria est. Neque satis erit in hunc finem, ut quis persequatur Associationes ætate matura factas. Ordiendum est ab ipsis incunabulis. Perquirendum accuratissime quænam Impressiones & Ideæ, *i. e.* Vibrationes & Vibratiunculæ, cum singulis vocibus & sententiis usitato conjungantur; & sic demum recte statuetur de natura Idearum vocibus affixarum, assensusque & dissensus, qui propositionibus adhibentur. His autem physiologice tractatis, novum lumen protinus accedet Artibus cogitandi & disserendi. Cordati omnes uno ore clamant, augmentum scientiarum quam maxime impediri verborum ambiguitatibus, & mole obruente; litesque eruditorum fere universas esse nil nisi *Logomachias* inanes. Optandum est itaque, ut verborum natura & usu diligenter excussis, abjiciantur inutilia, limitentur vaga, scientiæque ipsæ apparatu simpliciore, & ad praxin accommodatiore, instruantur. Egregiam vero hic operam præstabit, ni fallor, Doctrina Associationis, qualis a Doctrina Vibrationum nasci supra ostensa est, simulque magnopere conducet, tum ad radices præjudicatarum opinionum penitus extirpandas, tum ad scientias solide ædificandas, expediendasque a Scepticorum implicationibus & argutiis.

Præcipuus autem Doctrinæ Associationis usus censeri debet, quem perhibet Arti Ethicæ, moribusque emendandis. Cum enim hoc filo ducti investigare valeamus primas Voluptatum & Dolorum intellectualium, atque adeo cupidinum & aver-

sationum, impetii denique in has voluntarii & semivoluntarii, origines; eadem opera elucescet, quibus modis boni animorum motus fovendi sint, mali coercendi; et qua ratione unusquisque nostrum et *trabem ex sui-ipsius oculo, & festucam ex oculo Proximi possit educere*; nec non, quod in primis animadversione dignum est, quibus præceptis & vitæ institutione, teneræ puerorum mentes ad virtutem & pietatem optime formari queant. Porro, historiam Voluptatum et Dolorum intellectualium secundum hanc Doctrinam adornanti patebit, argumento novo, & ex ipsarum rerum penetralibus ducto, se nullibi posse ab agitatione & inquietudine esse securum, nullibi pedem figere, nisi *Deum toto corde diligat, Proximum autem tanquam semet ipsum*; adeoque semet ipsum amore omnino evanescente. Evanescet enim amor, quem sibi uni debet, præ amore aggregato Fratribus suis universis debito, & multo magis præ illo, quem poscit infinita Dei Parentis bonitas & perfectio, cujus amor omnes omnium amores complectitur.

Quod si objiciatur, verendum esse, ne ex hac Theoria multa argumenta depromantur contra Animæ humanæ immaterialitatem; ut etiam immortalitatem: Respondeo, in tota hac disputatione necessario postulari, Sensationes oriri in Anima a motibus in substantia medullari excitatis, tanquam vel causa physica secundum Systema scholasticum, vel occasione secundum *Cartesium*, vel Adjuncto secundum *Leibnitium*; nam eodem recidit, quod ad Theoriam præcedentem, quodcunque horum admittatur. Hunc autem Sensationum cum motibus in Systemate nervoso excitatis nexum jure postulari posse, tanquam rem observationibus & experimentis quam plurimis comprobatam, docent Physiologia & Pathologia. Interim hoc non est a priori demonstrare, vel aliquo modo explicatam dare naturam Animæ, sed tantum assumere & sup-

ponere existentiam ejus, commerciumque cum organis corporeis in casu simplicissimo, ut ulteriori indagationi locus detur. Quocirca, jacto hoc fundamento, statim conatus sum determinare speciem motuum, et determinando lucem afferre gravibus & obscuris quibusdam Problematis de Corpore & Anima, eorumque mutuo commercio, in casibus complexis. Sequeretur profecto ex hac Theoria, materiam, si modo Sensatione simplicissima donari posset, etiam evehi posse ad ultimum fastigium humani intellectus: adeoque omnino censenda est evertere argumenta illa, quæ pro Animæ immaterialitate adducuntur, a subtilitate sensuum internorum & facultatis rationalis. Attamen nullo modo definit, an Materia possit Sensatione donari, sed ut rem a se alienam in medio linquit, contenta illo nexu Sensationum Animæ & motuum cerebri, qui omnibus in confesso est.

Materialitatem igitur animæ nequaquam tueor; imo clare cerno, lubensque agnosco, etiam subtilissimum ratiocinium, ex Materiæ motibus & modificationibus, nil nisi ejusdem motus & modificationes educere posse. An vero sic satisfiat Problemati, adeo ut immaterialitas Animæ exinde stabiliatur, dijudicent alii. Itemque, an Perceptio pro Monade necessario sit habenda; atque hoc concesso, annon etiam causa ejus proxima, quæcunque tandem sit, & Adjunctum quodvis inseparabile, itidem pro Monadibus haberi debeant, Addam enim, mihi quidem videri, immaterialitatem Animæ esse ab ejus immortalitate prorsus sejunctam. Sufficit Eundem Illum, qui primo *inspiravit halitum vitæ homini, e pulvere terræ formato, fecitque, ut esset Anima vivens*, etiam mortuum resuscitare posse; nec minus velle, *nam omnes ei vivunt.* Omnis porro fiducia, in rerum natura, seorsum spectata, posita, impedit quo minus nosmet ipsos

totos Deo tradamus, & est species quædam Idololatriæ.

Sin vero ad Animæ immortalitatem Divinis Attributis & Religioni innixam deveniamus, longe abest, ut hæc Theoria ei adversetur. Cum enim reconditos aliquot divinæ sapientiæ thesauros aperiat, novaque exempla omnimodæ causarum efficientium et finalium coincidentiæ exhibeat: cum logices porro, atque Ethices fundamenta stabiliat, et pomœria amplificet (quorum unumquodque a sociata opera Medicorum & Philosophorum, *Lockii* & *Newtoni* vestigiis insistentium, brevi, si recte auguror, sperare licet) non potest non simul conferre ad Religionem, tum Naturalem, tum etiam Revelatam, atque adeo ad Animæ immortalitatem, confirmandam. Hæc enim omnia cognatione intima, et arctissimis vinculis, inter se uniuntur.

Religionis autem Revelatæ, ut de ea præcipue dicam, nitorem & firmitatem semper increscere, una cum veræ scientiæ incrementis, manifestum erit cuivis recolenti, quot et quanta ejus documenta a Viris eruditis & piis prolata sint, ex quo instaurari cœpit Res Literaria, in regionibus hisce occidentalibus. Neque licebit alicui, ut mihi quidem videtur (quicquid vel ipse in animo habeat, vel inde profecturum suspicentur alii) veritatem quamlibet novam eruere, quin simul lucem affundat Religioni Christianæ, veritatum omnium principio & fini; acceleretque exoptatissimum illud Sæculum futurum, sub quo omnia tandem subjicienda sunt Ei, qui est *Via & Veritas & Vita.*

FINIS.

DENTS

MBRIDGE AND OXFORD;

SE ON THE PASSIONS,

WITH A VIEW TO ASSIST THEM

IN THEIR MORAL ENQUIRIES,

S, WITH GREAT RESPECT AND AFFECTION,

INSCRIBED,

BY THEIR OBEDIENT, HUMBLE SERVANT,

THE AUTHOR.

TO THE STUDENTS

IN THE

TWO UNIVERSITIES OF CAMBRIDGE AND OXFORD;

THIS TREATISE ON THE PASSIONS,

DRAWN UP WITH A VIEW TO ASSIST THEM

IN THEIR MORAL ENQUIRIES,

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SECTION I.

ALL the writers who have hitherto obliged the world, either with set treatises, or occasional essays, upon ethics, have, to a man, taken for granted, that the passions, or to speak more properly, the affections and dispositions of mind, consequent upon, and taking their rise from the passions, or *original sensations* of the soul, were implanted there by the great Author of our beings. For finding them by experience to be such strong determiners of the will, both in respect of action in general, as of every particular mode of it; and what all men are subject to, though in different degrees: and knowing no other way to account for their origin, but by supposing them to be the gift of God with our natures, they were obliged to conclude them innate, or born with us. And in all their disquisitions on subjects of this kind, they ever argued upon the supposed truth of such innateness. Which universal agreement among writers of note and eminence in the lettered world, makes it extremely probable that they must have truth on their side; and to run counter to their opinion, not only denotes great particularity, but would be thought to imply (and very justly) much

presumption and self-confidence in an author. Conscious therefore how much a certain opinion has gained credit in the world, it was with some difficulty that I prevailed with myself to lay before the public the following sentiments relating to the origin of the human appetites and affections, which since I am now going to do, I beg I may be thought to do it with all imaginable deference to so great authorities on the other side of the question.

2. The same arguments, which the great Mr. Locke made use of, in order to prove there were no innate ideas, will, methinks, hold full as strong, and conclude with equal force against all *implanted* appetites whatever. If the mind be like a *rasa tabula* in respect of the one, the same reasons, which render her *such*, make it rational to infer that she must be *so* in respect of the other. For supposing God to have endowed mankind with such faculties and means of acting, as will enable them by a right cultivation of the one, and a proper direction of the other, to acquire those affections and dispositions of mind in a degree suited to their present dependent situation in life, whence the necessity of their being innate? As man is furnished with abilities for attaining them, it seems superfluous in the Deity to impress them on the mind, either before or at the time of his uniting it to the body. Because it is one of his distinguishing perfections, never to act but in a manner worthy of himself; nor to interpose, but when occasion requires it. Not to mention that it much better suits man's character, as a being capable of directing his powers, both of body and mind, to a certain end, to have himself the credit of forming benevolent appetites, and habits of virtue, than to

have the taste and relish for them given him by another. For in our calculations of the merits of actions, it is always to be considered, that so far as any action proceeds from such innate appetite or affection, just so many degrees of merit are to be substracted from the particular sum supposed to accompany that action in its real existence; that which is the effect of the influence of such principles being to be attributed wholly to it, and not to the being who is usually called, and from thence looked upon as, the doer of that particular action. In respect of animals below us, which have neither the understanding to know, nor the judgment to distinguish what makes for their preservation and happiness from what does not; nor to discover the obligations they are laid under by the end of their creation (pointing out to us the will of the Creator, in forming things with such particular tendencies to each other) both to propagate their kind, and to provide for the support and continuance of them. By reason of these defects in the animal world in providing for their own preservation, it is necessary they should be mechanically drawn to it by such or such particular determinations of nature, or otherwise by certain impulses *ab extra* considered as the effect of the agency of some superior invisible cause. And a slight observation upon the conduct and œconomy of the animal part of the creation will sufficiently inform us, that both their tenderness for their offspring, and the care they take of them, *universally* holds proportion to the degrees of their dependency on them. A surprising instance (all must confess) of God's consummate wisdom and goodness in his providential care and government of the animal

world. Instincts therefore (for such those determinations of nature, &c. are generally styled) both are and ought to be, the leading, governing principle in the brute creation. But man has a much nobler, and more excellent faculty (reason) substituted in the room of them, by which he is qualified to investigate the great Author of his being; to discover his relation to the several parts of the creation, and his proper concern and business in it; and by making suitable reflections on those (which he cannot avoid making, as they naturally arise out of the subject under consideration) he finds it to be the will of his Creator, that he first contribute towards his own happiness, and next towards that of others, according to the degree in which they stand related to, and are dependent on, him; and that he also acquire such habits, and ways of acting, as are necessary for attaining these ends with the greater ease and readiness; which how he does we shall have occasion to shew as we go along.

3. To prevent all mistakes about the signification of the term instinct, it is proper to observe, once for all, as a matter of fact generally acknowledged, that every one of the human species is born with an implanted sense, instinct, or determination of nature (if this be more expressive than the other) leading it to seek and pursue such things as are necessary to its preservation, and to refuse and avoid such as are destructive to it. Though perhaps, this sense, instinct, &c. is in truth the real, necessary effect of some sensation felt during its abode in the womb; which, if true, shall not be insisted on here, though the contrary, I presume, can never be shewn. But that such instincts are not founded on certain sensations in the soul after

its first appearance among external objects, seems evident from hence, that sensations of all sorts, and in all degrees of intenseness, (allowing sensation its proper acceptation) always pre-suppose the presence of some object, or objects, producing them: whereas these instincts exist prior to the application of any set of objects to their respective senses, and therefore prior to the sensations caused by them. A child, for instance, is furnished with a sharp, impulsive instinct that will not suffer its nurse to forget its wants, which, in all cases, it proclaims by tears; a language, as it is rightly adapted to, so is it constantly used in, the tender years of infancy. Such instincts therefore I am so far from denying man to be possessed of at the time of his birth, that on the contrary they are both affirmed and maintained to be of such absolute necessity, that without them he could not survive many minutes in the world after his first entrance into it. It is the innateness of moral principles, or the natural determinations of will only, that, it is presumed, ought not to be admitted, or, that the mind should be pleased with some certain forms or kinds of acting, and displeased with others, antecedent to all instruction and information about them, and separate from all reflection on their necessary or probable tendencies to our happiness or misery, when upon enquiry into their rise and formation, or the particular time when, and the manner in which, they first began to operate, it is apprehended they will appear to be no other than certain associations of ideas, which we either make ourselves, or learn of others. But to return from this digression.

4. If man, in virtue of his intelligence and free-agency (which on all hands, are allowed to be

properties essentially belonging to human nature) be an accountable creature, and is to be happy or miserable, in this world or the next, as he hath acted in a *designed* conformity with, or opposition to, the will and purposes of his Creator; upon this consideration it seems necessary, that he be laid under no temptation or biass to *this conformity* or *opposition*, further than what necessarily arises from the reflections he makes on the natural tendency of virtue and vice, to the happiness or misery of him that pursues the one or the other. Because virtue, as implying desert in the performance (agreeably to the idea all men frame of it) pre-supposes choice in the agent, and is wholly founded upon it, that is, it consists in a voluntary introduction of natural good into human life, and vice in a voluntary introduction of natural evil: and therefore so far as man is determined either from *within* or *without* to the production of one or other of them, just to that degree is such person not voluntary, but on the same footing with necessary and mechanical causes; and being ranked under the same class with them, it is not possible he should be any subject of rewards and punishments, in annexing which to certain actions, the greatest regard is ever to be had to the intention of the agent. Not but it is proper to observe, that, by acting with a view to this end, a propensity to virtue or vice may be acquired, for which propensity, (as it is the effect of habits of his own forming) man shall be strictly accountable, and the actions arising from it will, in such case, have all the merit or demerit with the foundation on which they are raised.

5. If moral principles, or determinations of will, either to, or from action, were natural and therefore necessary, whence could arise such a dif-

ference and contrariety amongst them in different nations, or in the same nation at different junctures or periods of time? If they bore the marks of nature's impression, it is reasonable to think, that those marks would be uniform and consistent; at all times, and in all places, alike; and the principles themselves would always have the very same influence upon men's conduct in respect of virtue and vice. But the truth is, we find the case just the reverse. Who ever reads the accounts which historians have given us of the several customs and institutions in use among the nations of whom they write, cannot avoid taking notice (and with some surprise at the strangeness of the phenomenon) that the same actions which raise abhorrence and detestation in one place, are not only countenanced and held innocent, but approved as virtuous in another. What can we think of those nations (and of such nations we read) where the killing of parents when they arrive at a certain age, and the exposition of children without distinction (sometimes) either of family or sex, are looked upon as laudable practices, and uniformly carried on without the least remorse or compunction whatever? How are we able to reconcile such actions, customs, &c. as those with the supposition of an innate moral discernment? It is but reasonable to ask therefore, for what end God impressed the human soul with such a sense? Was it not to dispose rational sensible beings to the pursuit of virtue, and the avoidance of vice, by being necessarily determined to approve such actions which promote the former, and to disapprove those which introduce the latter? And to discover an amiableness or unamiableness in things antecedent to all consideration of their being the necessary or probable in-

struments of happiness or misery to us? And if this was the design of the author of nature in forming mankind with such a sense, whence comes it, I should be glad to know, that in different countries the very same actions shall make different appearances, or different actions the same appearance in men's minds, I mean with regard to their likings or aversions to them? Supposing it was given for a principle of determination in the choice of some certain actions out of others, equally in man's power, though perhaps not so much in his inclination to perform, would it not be, that the same set of actions, and the like conduct, which are approved in one country, would be approved in all others, and precisely in the same degree? And those actions which are disapproved in one nation, would be disapproved in all others, and in the same degree likewise? It must be so, and could not be otherwise. An ingenious author I have somewhere met with, hath a remark much to our present purpose, "I am even apt to think, "says he, that what we call instinct (instinct is "here taken in the sense abovementioned) is a "mere *ens rationis;* a name without reality; a "remain of peripatetic philosophy."

6. Should any be of opinion, that this sense had *at first* right and well-pointed tendencies, and which continued to be so, till such time, as the sense itself became perverted by national vices, and an unaccountable concurrence of acts in favour of immorality, which, by degrees, took off the mind's relish for every thing that savoured of virtue, or had a kind, benign aspect upon social happiness: in answer to this, it may be asked, if man was at first naturally determined to approve a virtuous conduct abstractedly from all consideration of its

consequences, whence came such monstrous deviations from virtue, or what gave the first birth and after-growth to those vicious practices in the creation? As they stand directly opposed to the bias of human nature, which is supposed to draw so strongly in favour of virtue, and against vice, they could not at first be brought in without offering violence to, and being condemned by, the moral sense, whose determinations and propensities they are, *toto cælo*, opposite to. It is difficult therefore to make out, how vice should ever have gained so easy an admittance into the world, or have met with such a favourable reception when it had once crept in, if there was so strong an implanted principle (as is pretended) constantly influencing mankind by its operations. For it must be acknowledged, that the opposition made to all sorts and degrees of vice would ever be in proportion to the strength and efficacy of this principle, and its efficacy, one would think, should be according to the purposes intended to be served by it; because if this sense was intended as an incentive to virtue, and a restraint from vice, according to the best judgment we can form of the will of the Author of it, it must operate so as to attain the end for which it was given; it being highly irrational to suppose, that infinite wisdom moved by infinite goodness should ever infuse a principle which was sure to be baffled by every contrary mode and fashion of the age men live in. Besides (so far as any such things fall under the cognizance of our senses to discern) what is of the God of nature's impression is not so easily effaced, but being ever cut deep is generally indelible. "Nothing," says a judicious writer, "that is natural, was ever lost; "whatever was capable of loss, or great alteration,

"is artificial; and as it was introduced by instruc-
"tion, and continued by culture, so it died on the
"ceasing of these, on its parents or fosterers with-
"drawing." Further; if this sense be perverted, and its operations, either ceasing, or contrary to what they formerly were, its power and efficacy will be most visible in children, whose minds are yet unattainted with vicious habits, customs, &c. as Mr. Locke justly observes in respect of innate truths. But by careful enquiry into the nature of the mind's furniture, and the various steps she takes in acquiring it, we find, that children are absolutely indifferent as to any moral form or species of action, till such times as they become acquainted with the different tendencies which different actions bear to human happiness or misery; and are taught to love and approve one sort of conduct, and to disapprove and dislike the contrary. This is plainly discernable by one who attends to that progress the human mind (if rightly taken care of) is continually making from its infancy, through the several intermediate stages of childhood and youth, up to mature life. Their young and tender minds can take in any sort of impressions, in what ever manner offered and communicated to them, whether from external objects, or by rational agents; and may be fashioned for virtue and vice just as their instructors please. As they advance in years, and their reason begins to exert and put forth itself, they become capable of making just and proper reflections on the consequences of actions; of estimating the variety and importance of the effects they are big with to the happiness or misery of human life; and the different relations which different things hold to one another. And in consequence of this pliableness of children's minds with

regard to what is proposed to them, do we find such different and contrary approbations of moral characters in the world, and that mankind are so variously affected with the contemplation of them.

7. If the virtuous principle is supposed to be innate, the vicious one, of course, must be acquired; since it is too gross an absurdity to maintain, that God hath woven into man's constitution two principles that draw contrary ways at once, that is, that he should give him both a liking and loathing to one and the same thing; for that would be to undo with one hand what he had been before doing with the other, or, the one would be a negation of the other as to their effects upon man's behaviour in life. A procedure which might indeed (if possible to be observed) suit the character of an arbitrary being, but such as is entirely incompatible with all the ideas we entertain of the first great Cause of all things. And we find it to be fact, that most men are acted by both those principles, and in some it is observable that the vicious principle rises higher than the virtuous one: why therefore may not the latter be acquired as well as the former? or what arguments can be brought to prove the one innate, which will not conclude with equal force for the other being innate also? I leave this to the serious consideration of the reader.

8. From this difference in our approbation and disapprobation of moral characters, it is but a reasonable conclusion that we would draw, viz. that those actions which we stile virtuous, or vicious, are liked and disliked, not by nature and constitution, but from association and habit, as we shall endeavour to make appear in the following dissertation. But it is now high time for us to begin with our subject.

SECTION II.

AFTER the strictest enquiry into the nature, properties, or affections of matter, it appears to be absolutely impossible that any species of perception or consciousness should arise from, or be the result of, any possible configuration or arrangement of the parts of matter whatsoever. And if not, then consequently in man, as in every other inferior class of living, percipient beings, there must be two distinct separate principles, a *material* and *immaterial* one, as the proper subjects of these distinct, different properties, which are to be found in such a compound.

2. And though how an immaterial being should act upon matter, and move it to any given place in any assignable direction, is as inconceivable, and therefore as impossible to explain, as the manner in which material objects, or bodies in motion, make impressions upon, and so consequently raise perceptions in, an immaterial principle, yet both these cases, though inconceivable, are undoubtedly true, it being demonstrable, that immaterial substance and matter are so united together, and related in such ways and manners, as to have those effects reciprocally upon each other, though the modus of their operation on one another is at present not to

be comprehended. No particle of matter, however compounded and decompounded, or in whatever situation it lies, can ever begin to move of itself; therefore must be put into motion by some other thing, which, if it be also matter, must be moved by some other, and that again by another, and so on, till we come to some first mover, itself unmoved, and the beginner of motion in all material beings. For bodies can no otherwise act upon bodies, but by imparting the motion they have already received to each other. So likewise, on the other hand, A, for instance, moving with a certain given degree of velocity, impinges on B, another body, lying in its way, overcomes its *vis inertiæ*, or resistance against a change of state, sets it a moving, and, by that means, alters its figure, position, or site, with respect to other bodies about it. But this is all that is effectible in such a case. It can never by such an impulse or communication of motion excite in B any feeling, sensation, or consciousness of its change of state from rest to motion. Bodies may move on to eternity in all possible directions, and with all the various degrees of velocity assignable, and still after all, the event will be, both with respect to themselves and other bodies they meet with, no other, than a change of the figure, distance, and situation of their parts.

3. It is found by experience that there is such a close and intimate relation betwixt soul and body, that what passes in the one affects the other. Certain motions in the body raise certain perceptions in the soul, and *vice versa*, such and such particular perceptions in the soul produce such and such particular motions in the body——That sensations in the soul are the effects of certain motions excited first in the body by external objects, appears from

the extreme difficulty of keeping the same unvaried sensation for any considerable time together in the mind, unless the same object which first impressed it be present; for then, the motion which gave rise to the sensation being continued, the sensation itself also will continue. And experience shews this to be true. Not but that sensations remain some short time in the mind after the objects are removed beyond their sphere of acting, that is, they leave their ideas behind them.

4. It is universally allowed by all writers on the subject, that the brain is the sensorium, or the enclosure of the immaterial, percipient principle, where it receives its first notice of external objects, by the mediation of the nerves, which communicate to it the several sorts and degrees of motion impressed on them by or from such objects.

5. The nerves therefore are the instruments appointed by the Author of Nature for imparting such motions as they receive from outward objects to the sensory (the residence of the sentient principle) and to carry from thence and communicate to the muscles (the proper means of voluntary motion in all sorts of animals) the first conatas or tendency to motion and action, which (muscles) accordingly both distend and contract themselves, as such contraction and dilation serves to carry the orders and resolves of the soul into execution. But if the reader wants to be acquainted with the nature of muscular motion, and the manner in which it is performed, let him consult those who have professedly wrote upon the subject.

6. The learned are divided into two different opinions concerning the make and structure of the nerves. The generality both of physicians and anatomists hold them to be of a round, tubular figure;

whilst others take them to be so many chords (made up of certain small threads or hairs) and containing no cavities in them. Those who contend for their being hollow, say, they are filled with a certain fine subtle fluid, generally called and known by the name of animal spirits: which fluid they of the other opinion bring as an argument against the nerves being tubular: for, say they, the resistance of matter being supposed, and action and reaction commonly in all given cases alike and equal, it seems impossible that any fluid, under such circumstances, should move with a velocity proportioned to the quickness and fleetiness (if I may so speak) of sensation and volition. Or, granting this possible (though at present inconceivable) yet the rapidity and violence with which the fluid is carried, would, in all probability, tear in pieces, and break out of the vessels, which contain it. Whence they conclude, as the more probable of the two, the nerves to be combinations of certain filaments most closely joined and consolidated together, which, when touched at one end, the motion (of whatever length those threads or capillaments may be) is immediately communicated, that is, felt at the other. In the same manner, to give an instance, as when one touches the chord of any musical instrument, the whole length of the chord participates of that impulse, tremor, or undulation, that is, the vibration is carried from one extremity to the other in the same individual moment of time.

7. Which of the two opinions is the right, lies not in our province to determine. Only thus much we may observe, that allowing them to be tubular, it would be presumption in any one positively to maintain that God cannot fill them with a fluid of such degrees of rareness and tenuity (though no

fluid so subtle may fall within the compass of our observation) as to move with a velocity that will answer the purposes of sensation and volition. To a Being of infinite wisdom and power every thing which involves not a contradiction is possible; and he can bring about any assignable end by more ways than one. Let those make good their assertion who affirm that the probability of the fact, lies on the other side, and that the *seeming* make and fabric of the nerves, and the quickness of sensation and volition, or the readiness with which the will in all cases is obeyed, absolutely excludes any fluid (though ever so rare) from such an important share in the execution of its orders.

8. "That the nerves are governed by the mind, "or by the force and quickness of thought, in certain instances, appears, says an ingenious writer, "plainly from hence, that when we catch a flying "ball, or when we defend our heads from a blow, "our arm is then moved by the nerves guiding the "muscles, yet the nerves are directed by the mind; "for although the performances and œconomy of "the nerves are noble, they are not designed (by "nature) to contract or extend a muscle, without "order from the mind, or prime seat of sense—— "moreover, when it happens (contrary to nature) "that any of the nerves contract a muscle, without "commission from the mind, that muscle so moved "is then cramped or in convulsion."

9. If every distinct particular perception of the soul excites a distinct particular motion of the nerves, and reciprocally, every distinct particular motion of the nerves produces a distinct particular perception in the soul, it will ever be, that when the same motions of the nerves are repeated, the same perceptions shall be felt by the soul, and, *vice*

versa, when the same perceptions are felt in the soul, the same motions shall be excited in the body. Consequently, if the perception X, for instance, produces the motion Y in the body, the motion Y, whenever supposed to exist afterwards, must presuppose the perception X as the efficient cause of its then appearance; this follows by undeniable consequences. It is true, Y may afterwards be associated with some other motion in the body, which motion, in such case, may re-excite Y without the concurrence of X; or it may be, that X and some other perception may in such manner be associated, that the latter shall not only produce its associate, but also the motions in the body corresponding to each of them. How this is done we shall endeavour to shew hereafter.

10. As every motion of the nerves implies some certain perception in the soul, as the cause or effect of it, and, reciprocally, every perception in the soul implies a certain motion of the nerves, considered likewise either as its cause or effect, it affords a strong presumptive evidence of every animal thinking during the whole of its corporal life.

11. Sensations arising from the action of external objects upon the nerves, are ever more or less intense in proportion to the difference of susceptibility in the person affected. But in a species of beings formed, to all appearance, alike, how one comes to be more susceptive of pleasure and pain from the very same objects than another, is what I believe no one can strictly account for. Whether this be founded on any difference in the make, structure, or disposition of the nerves, by which they become better or worse qualified to discharge their respective functions, and so capable of receiving very different impressions, or whether (accord-

ing to the opinion of some) the ground of this diversity lies not in the solids which compose the nerves, or rather (according to others) in the fluids which surround, and most probably fill them, in virtue of which they are more or less in order to receive the motions excited by objects *ab extra*, and by or through them communicated to the sentient principle, is what no one, I presume, can with certainty determine. The foundation of this different susceptibility is really laid in nature, and, under that consideration, not adventitious, but born with us, (though capable of being improved and variously altered, as we shall see hereafter) and the several degrees of sense and feeling arising from hence truly innate. Allowing therefore a difference of perceptibility in mankind, as undoubtedly there is, and from hence one may account for the origin of all our desires and aversions, our joys and sorrows, our hopes and fears, and the different degrees of strength and influence in each to the determination of the will and the several inferior faculties of the mind, either to the pursuit, or the avoidance of such objects as differently strike and affect the sentient principle.

12. There is in every man not only a power of perceiving pleasure and pain from the application of external objects to the organs of sense, but also a power of attending to, and reflecting on those perceptions; which two powers in each individual are ever suited to, and in proportion with, one another; that is, the brisker and more forcible the perception is, the quicker and stronger attention is constantly paid it; and the slower and more dull the perception, the reflexion made on it is accordingly. This, I believe, holds universally. And from this attention to, and reflection on, our

perceptions, and the proper means of possessing or avoiding them, as they happen to be agreeable or disagreeable to us, can we account for the whole tribe of human appetites and affections as they shall be explained and deduced in order afterwards. And which seem to be no other than certain associations, which we form ourselves or learn from others, according to the particular course of life in which we are engaged, and in conformity to the situation we have been in.

13. From that difference of susceptibility mentioned in article the IIth, with the different reflex acts consequent upon it as explained in the last article, arises that diversity of sense and intellect so observable at first amongst men: which difference also is enough to consitute a man passionate in greater or less degrees; makes him more or less pliant and active in whatever he turns himself to, and gives him, or is itself, a tendency to the forming a certain particular temper, or cast of mind, though this tendency be liable to great alterations, as we shall find hereafter.

14. The body, as we observed above, is capable by the motions produced in it, of affecting the soul, and of raising perceptions there; and that the soul in return has a power of acting upon the body, and of exciting motions in it, hath in like manner been shewn; there is further to be considered another extraordinary power of the soul, which is, that by a mere act of the will she can produce certain motions *de novo*, or such as never actually existed before, and can wholly suspend those already produced on such or such occasions, if not at the first attempt, yet in time, and by degrees. At her volition, the several parts of the

body (capable of being put into motion) will range and move themselves in manner and order perfectly conformable to her views. And she can still go beyond this. For being taught by others, or reflecting herself on the tendencies of such dispositions of mind, as anger, love, gratitude, shame, &c. to the production of happiness, or to the prevention of misery, she can form them herself, and annex them to particular actions; which dispositions shall be attended with such motions in the body as correspond to the particular nature and kind of them. And what deserves particular notice, by a careful review of the probable means of happiness and misery, she can either strengthen or reduce her desires as she finds necessary to carry on the great purposes of life and being. Of which instances will be given below.

15. It is the opinion of physicians, what by reason of the heat inseparable from the medullar substance of the brain, and the beating of the arteries interspersed in those parts, that the agile particles composing this substance are in a continual vibratory motion: and that certain vibrations exist even whilst the fœtus is in the womb. Supposing then the state of the medullar substance, or the motion of its particles, which with others before us we may call the sensory, to be X, before the brain is impressed by external objects. Let it then be impressed by the object Y, it is evident from the nature of this motion once produced, that the medullar substance, or brain, will not immediately return to its first state, but the vibratory motion from Y will continue some short space, or its state then we may call Y, receding afterwards by little and little to X again; or this last motion continually diminishing, the former ones will recover their

power of affecting the sentient principle. But let the same impression from Y, be frequently repeated, and its conatus to return to X will be less and less, at the same time that its tendency to Y grows greater and greater, till by further repetitions, Y becomes its proper state. Let the brain be afterwards impressed by the objects F, G, and it will acquire in time an aptness and disposition for forming the particular states F, G, and after more repetitions, will actually have completed them, or the site and reciprocal actions of the medullar particles will be accommodated to those last acquired states of the brain.——N. B. By the brain, or the state of it, I mean not the whole brain, but that part or region of it which answers to the particular nerves thus impressed, whether they be the optic, auditory ones, or the others: not but that those vibrations may affect some other adjacent regions of the brain, and excite there certain lesser inconsiderable ones, their strength gradually lessening the longer they continue.

16. What I would infer from the observation above is, how that a fitness or disposition to receive some impressions, and an unfitness or indisposition to receive others, depends on the state of the brain, according as it hath been more or less impressed by such objects, or that certain motions frequently impressed on the nerves creates a tendency or propension in the brain to receive them there in times to come, i. e. whenever the objects offer themselves again. The reader is desired to take notice of this, as it will enable him to solve many difficult cases which will probably occur to him whilst he is upon the present subject.

17. By the last article it appears, that motions impressed on the nerves from external objects, and

by them communicated to the brain, leave there certain faint traces of themselves, or that the same motions are still continued, though in a feebler and gradually decreasing degree; in like manner we may observe, that sensations also leave behind them ideas in the mind; and as those lesser motions answer to the greater ones, so do ideas to sensations; which sensations likewise may be considered as the cause of ideal existences, as the other, that is, vibrations, are of the lesser corresponding motions. From which continuation of each as we just now took notice, results the disposition to receive both one and the other for the future.

18. *By association I mean that power or faculty by which the joint appearance of two or more ideas frequently in the mind, is for the most part changed into a lasting and sometimes into an inseparable union.* It is probable association may be the result of, and owing to, that relation, which the soul and body have to each other in their joint incorporated capacity. And since by ideas are understood certain motions of the nerves, *as* felt and perceived by the soul; then, probably, the reason of ideas when once united keeping ever after in company together, is owing to a succession of motions in the body, or, rather, to those motions of the nerves always producing one another. For this is fact; a child has the idea of the sound *nurse* often presented to the ear, at the same with the visible appearance of the nurse herself in the eye, and by this frequent conjunction it comes to pass, that the visible appearance of the nurse shall itself excite a faint image of the sound nurse in the ear; and the sound nurse in like manner shall excite a faint image of the visible appearance of the nurse in the eye. And all this seems to be effected by

the mutual influence which the motions in the optic and auditory nerves, constituting seeing and hearing, have upon one another according to the laws of matter and motion.

19. And though the heat residing in the medullar particles of the brain, and the continual pulsation of the arteries will not, as we just now observed, suffer the motions excited there wholly to die away, yet other motions being ever and anon impressed by external objects on the nerves, and from thence conveyed to the brain, those latter motions striking the sentient principle more forcibly, will obliterate the others for a while, or during the time this last impression continues; but as this wears off, which by degrees it will do, the former motions revive, and first those, and then others, will come to be taken notice of, as they pass in review before the mind. But how some preferably to others, come into view, is not so easy to account for. Will the following solution be deemed satisfactory? However, such as it is, it shall be laid before the reader, who, after he has considered it, may either reject or acquiesce in it, according as it seems probable or improbable to him. We have observed in article the 16th, how the brain acquires a propensity to the particular states a, b, c, d, e, f, &c. according to the degree in which it has been impressed by the objects A, B, C, D, E, F, &c. alternately. Let those impressions be successively repeated a certain determinate number of times, and the tendency to those states will become stronger and stronger, or the dispositions in the medullar particles to receive those impressions will succeed each other in their turn. Supposing therefore the state A to exist, or the brain to be impressed by the object A singly, and the tendency

to the states b, c, d, e, f, &c. follows of course, or the motion excited by A, will produce all the rest in the order they used to arise and follow each other, every one of which will accordingly exhibit its correspondent idea to the soul——Such, in fact, is the mechanism of the human body, and so strict a correspondence is there betwixt the several parts of which we are composed, that whatever affects some one part does by its engraftment amongst, and incorporation with the rest, affect another, and that, another, and so on, according to their mutual dependency on each other. Thus when one of these parts is moved, all the others receive that motion successively in degree suited to the original impress, the agility of the parts to be moved, and their connection with, and situation amongst, one another.

20. It may probably be expected, if outward objects are necessary for exciting these motions at first, that they cannot be re-excited afterwards without the actual presence of the very same objects. To which it is answered, though it is certainly true those motions cannot be there excited without being first impressed on the nerves from objects *ab extra*, yet, notwithstanding this, there appears no necessity of the object being always present in order to revive those motions. We have the ideas of things and persons at the distance of one, two, or three hundred miles from us; and can it be said, that it is the actual appearance of the object which re-excites those motions? The bare sound or recollection of the name the object goes by is sufficient for this purpose. The fact is, those motions and the ideas answering them are raised and brought into view by association. See above, *where the visible appearance of the nurse shall ex-*

cite a faint image of the sound nurse in the ear, and the sound nurse in like manner excite a faint image of the visible appearance of the nurse in the eye, &c.

21. It will likewise be expected by some, if association be mechanical, that particular ones when once made should ever continue. But the case we see to be many times otherwise. Associations are frequently broken; and others of a contrary nature and quality rise up in their room. Our desires and aversions, in respect of one and the same thing plainly shew this. To which the answer is, for the very reason that associations are subject to the laws of matter and motion, it cannot be, but that they must be liable to the greatest alterations, and in time and by degrees be quite obliterated. For motions are ever and anon overcome by contrary ones, and in resisting mediums they decay. And therefore since different and contrary motions of the nerves will ever follow contrary and different resolves of the will, it is certain, that so long as there are different and contrary acts of the one, there must be different and opposite motions of the other, and when two contrary motions, of unequal moments meet and impinge, the greater will, of necessity, prevail over and destroy the less.

22. Some of those who contend for the existence of animal spirits, as employed in conveying to the soul notices of things *ab extra*, and in carrying back from thence the orders of the will to the several parts of the body, have given us the following account of association. They suppose the impressions on the nerves from external objects, and thence continued to the brain, to be kept open by the resorting of the animal spirits thither for that purpose. That when two or more objects present

themselves at the same time, the impressions on the sensory caused by them lying so near each other that in turning to that part of the sensory, the mind cannot view one without the other, and so the ideas answering to those objects ever after keep in company together. In like manner, when certain distinguishing circumstances attend any particular object, such object never appears to the mind, that is, the idea of it, without those circumstances accompanying it. And those impressions on the sensory are in times of sleep designedly sealed up from the view of the mind, that the body having now no disturbance given it, may have an opportunity of recovering from the indisposition the fatigue it has been in occasioned, or, the seat of memory in the corporeal sensory at such times is shut up, and so the impressions lie concealed and out of sight. And this is supposed to be done by preventing the animal spirits being carried thither to make the impressions patent. But this account of the employment of animal spirits seems not satisfactory. For either the animal spirits are necessary to keep the impressions on the sensory patent, or they are not; if necessary, then all impressions made there are kept open by them, or only some of them; if all, then no idea of any object, action, or event, or of the least circumstance attending each, could be obliterated, or there would be no forgetfulness of any thing which had ever been once perceived by the soul; contrary to experience. If but some of them are continued patent, I ask, why are those so preferably to others? Is this done by an act of the will? When the veil is taken off the register, are not all the impressions, one as well as another, equally exposed to the animal spirits which flock thither? Or are not the animal spirits

enough in number to be sent, if not at once, yet at different times, to all parts of the sensory, to revive the *dormant latent* impressions, if any such there be? The sensory is not of so large an extent, nor they of such a sluggish nature, but what this may be done. And if so, whence could forgetfulness of any kind arise? This is a query I presume not to solve myself, but propose it to be answered by others.

23. In forming those associations, we are sometimes active, at other times passive, which therefore will come under different denominations, conformably to the manner in which they are acquired. The situation we are in does gradually, though insensibly, beget associations, which, in a certain sense, may be stiled necessary, as they are so far made without the concurrence of the will, or in which the will seems to be either very little consulted or concerned. But though many of those associations arise mechanically as it were, from our circumstances, and the relation we stand in to things around us, yet have we it very much in our power, either to strengthen and confirm, or to impair and eradicate, them. This is, I believe, fact. Though it must be owned, it is the opinion of some that we have no freedom, no principle of agency, but are like machines, a piece of clock-work, for instance, wholly passive, &c. But I would appeal to those gentlemen, whether they do not feel within themselves a power both of determining and acting independently on the objects which solicit their choice? They must allow it to be so. We find we are not at all times carried away with the stream, but in some cases can bear up, and move against it, though it be but heavily,

till by continued strivings, and further advances, slowly made. we acquire such degrees of strength, as to stop the current, and if not to drive it backwards, yet to turn it some other way, and give it a new direction. No one was ever known to have been so much under the government of any habit, but what he had it still in his power to have emancipated himself from it. Besides, from whence I should be glad to know results that self-complacency and satisfaction of mind ever consequent upon our performing certain particular acts, or virtues, unless from a consciousness that we were at liberty to have acted otherwise? So far as we imagine ourselves under necessity or restraint of any kind, just to that degree do we not think ourselves accountable. From whence, I say, should this complacency arise, and how comes this sense of unaccountableness, but from the strong convictions we are under of having a principle of free-agency independent on, and superior to, all other principles! It can, I presume, be no otherways accounted for, experience also constantly affirming, that it is in the power of the soul, either to strengthen or weaken her desires, to form new associations, or to break old ones, (instances of which shall be given hereafter) as she finds requisite for the carrying on her views.

24. Granting the mind has a principle of free-agency in common with her passive powers and affections, yet is it capable of being affected by them, as well as of controuling, and, in some instances, of acting independently on them. And though she chooses and acts sometimes in opposition to their solicitations, yet does she often exert herself, and all her faculties, in compliance with them. If this were not the case with us, to what

purpose would it be to set before us motives of happiness and misery, in order to engage the will to or from certain particular acts, on whose commission or omission, our present and future well-being or its contrary, is foreseen, in various degrees to depend.

25. Such, in fact, are the means the mind employs in furnishing herself with a proper stock of materials for acting, that they seem to have a necessary, and reciprocal dependency upon each other; and are requisite, in their several places, for answering the ends of such a creature. Some being found necessary to move the soul, and stir her up to action; others to lay before her the consequences she is going to be led into, and how they may be best obtained or avoided, as they appear, upon examination, to be conducive or otherwise to her final interest; and after careful enquiry made, and all proper information obtained, she still has the power of choosing and determining within herself. And in this, I conceive, lies the chief excellency of a rational creature. The case in short is this. Man, as A, for instance, finds himself placed in such particular circumstances; out of those circumstances, result gradually, and in a manner necessarily, certain associations which lay a biass upon the will. But whilst the mind is under this influence, she has, if she will but exert it, a power of taking a survey of those effects which such associations, if indulged, will probably produce; and can afterwards encrease or diminish, strengthen or destroy them, as appears most suitable or otherwise to the situation she is in.

26. That the will has habits of its own forming, and how they are formed by its own proper acts, or from the free exertion of itself, the reader may see by consulting archbishop King's essay on

the origin of evil, with the translator's notes to it. ——Those in common with other associations are liable to great and sensible alterations; by being often repeated they keep contracting fresh degrees of strength, and through long disuse, they lose what they had formerly acquired. This I take to be the nature of all habits in general. Let it be considered further, that the same principle which by an act of its own gave rise to certain associations, can by another act, or acts of its own, equally destroy them, and, if occasion requires it, form new ones in their room. Though it must be confessed, associations can be no more made than they can be dissolved at once. If much time, and many repeated acts be necessary to the bringing some habits to their full growth and perfection, when they once arrive at this, the same, if not longer time, and, probably, more repeated acts, will be found requisite for the destroying of them. But habits, though of the longest standing, and in the greatest degree of strength, may notwithstanding be eradicated; this is fact. And besides, it is proper to observe, that habits arising from the exercise of this active power and principle of liberty, will bear such relation to all other habits, as to be able to affect them, and be in return affected by them, or rather the will (the efficient cause) be itself affected by and through them.

27. Experience is ever shewing us, that the several parts of the body capable of being moved, do all of them move by order of the will agreeably to the views and intentions of the soul. As she perceives, considers, and resolves upon things, and the manner of doing and avoiding certain actions, so do those parts fall into a state most conveniently adapted for forwarding such designs, and carrying

them into execution. When the soul, to give an instance, judges the resistance to be met with in a contest with her enemy greater than her forces, the several parts of the body are immediately formed into a posture every way suitable for flight: if she judges her forces superior to those she has to engage with, she puts herself into a proper state of defence, and accordingly either begins the attack, or else is prepared to receive it.

28. And if the various motions, gestures, &c. of the body are so many indications of what passes in the soul and is transacted there, it is evident, that having given the former we are able to find out the latter. And on this apparent resemblance betwixt one and the other is founded physiognomy, or the art of knowing the genius, the temper, the inclinations, and propensities of men, by a view of their faces and other corporeal features.

29. In respect to sensations from external objects, it is proper to observe, that a difference either in the figure, site, or distance, of the object acting, or in the medium through which the motion is propagated, or in the disposition of the organ receiving it, a difference in any of those, I say, will cause a different motion of the nerves, and, of course, a different sensation, "when a certain con-"currence of causes is necessary to the producing "any effect, a different situation or concourse of "such causes will be attended with a different ef-"fect."

30. Every distinct sensation in the soul is ever accompanied with a distinct motion in the body. Thus in anger, the parts of the body move differently from what they do in love, gratitude, or any other of the passions. For in forming every disposition to be annexed to certain particular actions,

the soul has a distinct particular end in view; and having so, the means she useth ought to be particular likewise, that is, the motions in the body ought to be, and in fact are, conformable to the soul's intention in such particular modification. This is but a corollary from article the 3d.

31. Fact shews, that the same motions with their concomitant sensations frequently repeated lose their former intenseness. By being long confined to the same meats we lose that relish for them we formerly had; they cloy the appetite, and either grow insipid, or, which sometimes happens, unpalatable. The same may be said of the various diminutions of the pleasure of sight, smell, &c. The pleasure of sensation usually decreases in proportion as the times of enjoyment encrease, till, by further repetitions, the sensation either becomes nothing, or is changed into its opposite. Hence it is, that a constant confinement to one and the same thing makes us at last contract a loathsomeness towards it, though the possession of it now and then, and after certain intervening distances, would not fail of being ever attended with agreeable perceptions. And to this changeableness are all our sensations, more particularly those from external objects, liable, but in very different degrees. The same holds in respect of sensations of the disagreeable kind, which ever become less and less distasteful the oftener they are repeated. The following causes may be assigned for it.

32. Reason and fact do both agree in this, that different motions of the nerves differently affect the soul; but nothing can affect her otherwise than by the alteration it causes in the state, site and disposition of the medullar particles of the brain, which by some is thought to be the sen-

sory on which all external objects are delineated. Now the oftener the same impressions are made on it, the better adapted they become to the state of the sensory, or rather they constitute its then present state; and whilst the soul continues in the same state, she feels no change; for being long accustomed to the same motions, they grow familiar to her, and she feels not, that is, does not attend to the change which happens; nor, in truth, is she capable of it, till by many other and different repeated impressions, the state of the sensory becomes changed again, and another introduced, when the former, equally with other impressions from external objects, recover their quondam power of affecting the soul—It is, in reality, the nature of all bodies to suit themselves to any state they have been long used to. There are, I believe, but few exceptions to this general rule, which both animate and inanimate bodies almost inviolably observe. Bend a stick, for instance, and when the force with which it was kept so is withdrawn, it will return to its former straitness, but it may be bent so often, and continued bent so long, as to remain ever after crooked of itself. The same holds with regard to animate, sensitive bodies; the oftener the same perceptions are excited, the less sensibly they are felt. Thus, to specify in some instances, being inured to danger lessens the intenseness of the sensation accompanying fear. And being employed about, or conversant with, persons in distress, weakens the sensation accompanying pity. Both these instances are verified in the case of the soldier and the chirurgeon. The same is true of all the other passions.

33. It may probably be the consequence of the finiteness of men's capacities for happiness and mi-

sery, with regard both to the intenseness and duration of each. For as no pleasure can be enjoyed but to such a degree, which if it exceeds, it either ceases to be pleasure or converts into its opposite, so no particular degree of pleasure can be repeated but just so often in such a limited time, without being subject to the same change, or, in other words, as no object is capable of producing pleasure above a certain degree, so neither can such object produce that degree indefinitely, and without intermission——The reason is, the capacities of all beings must be apportioned to their several natures and modes of existence; and their various movements, actions, enjoyments, sufferings, and the sensations attending them, must again be accommodated to those capacities. Consequently a finite being can but enjoy pleasure, or suffer pain, to a certain determinate degree of intenseness and duration. See Locke's Essay, vol. i page 99.

34. It is undoubtedly for certain ends (worthy himself) that the great Author of our beings has formed the human soul in that particular manner as to be necessarily pleased with variety, and of such a nature as not to admit of confinement to any one set of objects whatsoever. "Who can "sufficiently admire," says an ingenious writer, "the structure of that curious organ of sense "(taste) formed to distinguish all the varieties of "proper nourishment, and directing us to a due "proportion of it by the admonition of grateful "sensations, so justly regulated, as to diminish in "delightful sensations as we approach towards sa-"tiety, and to correct excess by becoming at length "distasteful: their end attained, they leave the "mind unmolested for a convenient interval, de-"signed to be filled up with nobler delights; from

" whence again, they gently recall our thoughts by " gradually encreasing appetites, at the seasonable " hour of repast. So wonderfully exquisite is the " mechanism of all the senses and faculties: those " useful instruments, mutually assisting, not inter- " fering with each other in their motions; unless " their harmony be disturbed by the unskilful use " of them, and all of them contributing, if rightly " employed, to the advancement of our hap- " piness." It was probably contrived by the Supreme Intellect, that satiety should be the consequence of an immoderate gratification of any of the appetites, on purpose to wean off, by degrees, the soul's attachment to the things of this life. See Spectator vol. viii. Spec. 626.

35. But though sensations usually grow less and less intense as the times of their production encrease, and therefore those of the agreeable kind become less pleasing, as the disagreeable ones are less offensive the oftener the exciting cause of each of them occurs, still it deserves our notice, that the want of the first sort of sensations generally causes us great anxiety; and men are induced to gratify their desires not so much on account of the pleasure which the gratification yields, as to avoid the uneasiness which the not gratifying them creates. This is the case of those who drink, smoke, and take snuff, to such a degree as ever to be restless and dissatisfied when not thus employed. By their own confession they take little or no pleasure in such things, but yet are uneasy without them. Whence comes the difficulty of leaving off such objects, is what wants to be accounted for; since the pleasure in possession commonly decreases very nearly in proportion as the uneasiness for the want

of them encreases. It is, in truth, a remarkable property of the soul, to be in love with objects which give her little or no pleasure, and that the oftener she uses any thing, the less agreeable it is to her, yet the more solicitous she shall be for it, and always hankering after the enjoyment of it.

36. If the same motions of the nerves be but seldom repeated, the will is slowly, and, in some instances, with extreme difficulty, obeyed; if often, then very readily; sometimes indeed so readily, that great care and attention are required to prevent those motions succeeding each other over and above hastily: which commonly is the case with those who learn to play on any instrument of music: their fingers being apt to run over too nimbly the several strings answering to, and forming the various notes requisite to making up of any tune. "By many reiterated productions, certain motions "in the body follow one another by a sort of ab- "solute necessity; without, and in some instances, "against, the views and design of the soul. One "motion however excited, whether by a mere act "of the will, or by the impression of some object "*ab extra*, giving rise to all the rest, instantane- "ously succeeding each its associate, as by a na- "tural connection of one with the other."

37. Those active habits, as they may be properly called, are formed by long use and custom, and follow, as an effect, from that particular course of life men have been trained up in. It seems, the more we use ourselves to any way of business, the more it influences our practice, becomes woven by degrees into our frame, or what makes a part of it, and generally constitutes our character in life—From article 36 and 31, we may observe,

38. That since sensations *from without* dimi-

nish in intenseness the oftener they are repeated; and that as those sensations will necessarily give rise to a course of acting which ever coincides with the nature and tendency of such particular associations, and as this tenor of acting gradually settles into a habit, and grows more confirmed and operative the longer it is followed, so, practical principles, or active habits, founded on passive impressions, will, in this view, be continually gathering more and more strength, though the sensations themselves be always weakening; or, in other words, that habits formed by acting upon certain motives shall be ever advancing in strength, at the same time that the motives they are founded on are gradually losing it, or, are less sensibly felt and perceived by the soul. Thus, to resume one of the foregoing instances in article 32, by being accustomed to danger, habits of defence, and a proper posture of the body, are gradually formed, as the sensation accompanying fear proportionally weakens. The same may be said of pity, and holds of all the other passions, and their concomitant sensations. What has been now said of passive impressions and active habits, is applicable to all kinds of passive impressions and active habits whatsoever, whether habits of mind or body; for habits there be of both.

39. We have already observed, that certain particular motions in the body do by a fixed, general law, ever attend certain distinct, particular passions of the soul, and, reciprocally, certain particular perceptions in the soul ever accompany such and such motions in the body. It is equally fact also, that a certain habit, fitness, or disposition of body is gradually contracted by the long indulgence of any passion, which not only makes men

more subject to such passion for the future, but also tends as well to inflame it, as to lengthen its continuance. By being often angry, for instance, we insensibly bring upon ourselves such a habit as both causes us to take the fire sooner, and not only so, but which makes it burn the fiercer and more violent; we are apt to grow peevish and fretful at every little cross accident that befalls us, and to shew an unbecoming resentment upon every petty injury we receive, though instances of both kinds, in our present circumstances, be unavoidable. And which is more, during this uneasy state of mind, we are wholly indisposed to receive any of the agreeable sensations, though the objects which excited them at first, and which, at any other time, would excite them again, are present. The same is true of the long indulgence, and frequent returns, of any other of the passions, whether of the agreeable or disagreeable kind. It seems the more our bodies are accustomed to the same motions, the more unfit they be to receive others which are constituted by nature the occasions of other sensations in us. If this cannot be accounted for by what has been said in article 13 and 16, it is, in truth, too arduous a task (at least for me) to undertake to determine, viz. whether the ground of this disposition to receive some motions, and not others, with the sensations attending them, lies wholly in the body or in the soul, or partly in one, and partly in the other; I only pretend to state a matter of fact. Let those, who can better do it, explain the reasons of it.

40. But to what cause, or causes, associations owe their being, or, being formed, which way they subsist and are continued, whether in analogy to the laws of mechanism, as is probable, that is, in

the manner described in article 19, or agreeably to the opinion of those in article 22, or that a more rational account than either of those can be given, I shall not presume myself, but leave to physicians and anatomists to determine, whose acquaintance with the structure of the brain, and the reciprocal influence which the soul and body have upon each other, better qualifies them to solve such kind of difficulties. It is sufficient to observe that all allow there are such associations, without determining any thing about their first birth or after-growth: of which associations the reader is desired to take the following account.

41. There seems to be a necessary correspondency or connection betwixt some ideas and others. The ideas of space and time (however we come by them, whether they be general abstract ideas of the mind's making, or infer the existence of something *ab extra*, makes no alteration in the case) those ideas, we say, associate themselves with, and are the inseparable concomitants of, all others. When we see such an event turn up, or a person perform such an action, the idea of that person, action, &c. never presents itself to the mind, but the time when, and the place where, immediately occurs along with it. The idea of husband also infers that of wife; and the idea of parent that of child; and we can never think of king and prince without having at the same time the idea of subject in our minds. This association may be called natural, as it is founded in the necessary connection and dependance which such ideas have with one another. In like manner, when two or more objects, at the same time, strike the same, or different organs, if the impressions are again and again repeated, the ideas they excite will coalesce and unite. Which

ideas may properly be ranked under the same class of associations.

42. Many of our associations are voluntary and from ourselves. It is common for us to join a number of loose and independent ideas together, which very often follow one another ever after in a train, and which will not, but with difficulty, admit of a separation. Instances of this sort will be given hereafter.

43. Other associations (and those the most considerable as to number and importance) grow out of the circumstances we are placed in, and are the necessary effect of that particular course of life we are brought up to. Some also we learn from imitation, or by taking the acts of others as the rule and measure of our own, or are taught by those we are brought up amongst, and have had converse with. We walk, we ride, we lie down; we eat, dress, visit, &c. as the mode in fashion is; we hope, fear; we love, hate; we approve and disapprove, according as our education and training-up have been, and in obedience to the prevailing custom of the age. Most men, I am of opinion, reserve all their life long something of the tincture they imbibed in their infancy; and an affection or sort of veneration for those principles they adopted at a time when their tender minds were susceptive of any sort of impressions. Hence the source of national virtues and vices; and the different, and (sometimes) contrary sentiments and perceptions of them in different ages and countries, according as men's associations have been different. We join the ideas of certain acts to certain qualities in persons; and annex genteelness, worth, and grandeur to objects which in themselves have none; agree-

ably to what we have seen others do before us, and in conformity with established practice.

44. We shall close this section with the following momentous observation, that all the various actions, and passions of the soul, such as perceiving, apprehending, deliberating, judging, reasoning, and, in a word, the several intellectual operations of all sorts, depend in great measure on the due order and dispositions of the parts of the body, that is, upon the organs discharging their respective functions in a manner agreeable to the nature of the compound, and the purposes of the soul. It is without controversy, a most surprising instance of the force of union, that when either soul or body, though two distinct principles, as to essence and properties, is affected and out of order, the other should be also, and the whole man or compound suffer together, a defect or indisposition in one causing the like in the other.

SECTION III.

THE following truths every one will assent to by what he feels when the sentient principle is affected with impressions made upon it *ab extra*.

2. The various constitutions of animate, organized bodies, and the powers of material objects surrounding them, are such, that the application of one to the other will have different, sensible effects; from whence a difference in things is clearly deducible; for, if the site, figure, magnitude of objects, and the degrees of motion impressed on them, were the same, the same sensations would ever arise, supposing no alteration either in the medium or organ.

3. We find by experience that some of those sensations are pleasing to the soul, and, as such, styled agreeable; others the reverse of them, and those we call disagreeable.

4. What produces pleasure we call a means of happiness; and the means of happiness always produce in our minds an approbation of them; what produces pain, we call a means of misery; and the means of misery likewise produce in our minds a disapprobation of them. We approve and disapprove therefore of objects, actions, and events as they tend to give us pleasure and pain. Which af-

fections of mind (approbation and disapprobation) are unavoidably consequent upon man's being constituted a being susceptive of happiness and misery.

5. Some things promote our happiness without being conscious they do so; such are all inanimate things: others contribute to it, knowingly and with design; such are beings formed with principles of reason and free-agency. The former we properly enough stile involuntary, the latter voluntary, means of happiness. The same may be said of the introduction of misery. And men's approbation and disapprobation of those different means of happiness and misery will be also different, as we hope to make appear with the reasons of it, in the following section.

6. To procure itself the greatest possible sum of pleasure, is the proper concern of every rational sensible being, and what both is, and ought to be, the ultimation of all its aims and pursuits.

7. All pleasure apprehended to lie within our reach, produces a desire of it; pain likely to be endured, raises an aversion from it. The means of happiness excite a love of them; the means of misery an hatred to them. And from those two variously modified, flow all those other dispositions of mind, which we sometimes stile passions, at other times affections, though the terms expressing their import and significancy, are, and ought to be kept distinct.

8. Pleasure is not barely confined to the object producing it. But the means of pleasure, whenever viewed by the mind, have a present pleasure annexed to them proportioned to the quantity expected in the enjoyment. The same is likewise

true of pain. For as happiness and misery are not, so neither can the procuring or preventing causes of them be, indifferent to man. And this pleasure and pain, arising from the probability of possessing future pleasure and pain, may, and not improperly, be stiled passion.

9. The probability of possessing happiness, or of procuring the means of it, raises the particular modification of mind called hope; which is ever accompanied with certain pleasing, agreeable sensations—And the probability of enduring pain raises the modification of mind called fear; which is likewise ever attended with painful and disagreeable sensations.

10. It is proper to observe, that hope and fear do not only arise upon the apprehension of pleasure and pain likely to be enjoyed and endured, but that the removing, or the probability of removing, a present or impending evil, raises hope; as the probability of losing a means of happiness, raises fear. The sensations attending which hope or fear shall *as to their intenseness* be in a compound ratio (to speak in the mathematicians style) of the degrees of such probability and the quantity of misery to be removed, or of happiness to be lost.

11. The reason why hope and fear are attended with those sensations of the agreeable and disagreeable kind, is this; hope, as we have observed, is founded on the probability of possessing a means of happiness; fear, on the probability of losing a means of it, or of enduring a means of misery. But the means of happiness and misery, whenever reflected on, have a present pleasure and pain ever accompanying them, proportioned to the apprehended sum of each.

12. Whatever makes, or is supposed to make,

a part of our happiness, and in our power to obtain, we shall necessarily desire: and as desire puts us upon attempts to obtain the desired object, so is it ever attended with an uneasiness suited to the particular nature of it; for our desires will be different as they respect different things. The question is, whence arises this uneasiness, or to what cause are we to ascribe it? I answer, it is *in part* owing to the absence of the thing desired; for how can man be happy when what should make him so is wanting? Supposing him to be easy without it, there would be no place for desire; and he would be perfectly indifferent whether he had it or had it not. And *partly* also owing to the uncertainty of possessing what is desired, because a state of uncertainty is always accompanied with anxiety. But when certainty is once substituted in the room of it, anxiety, and its inseparable attendant (uneasiness) then cease. And the very instant that uneasiness expires does joy succeed in its place, that is, the mind reflecting on the enjoyment of an approaching good, feels that pleasing sensation we call joy. Desire therefore is attended with uneasiness as well on account of the want of the thing desired, as from an apprehension of the uncertainty of possessing it. For happiness and misery, and the probable causes of them, cannot be indifferent to such a being as man, but by his constitution he must be affected with them.

13. The gratification of desire is always accompanied with pleasure, and the reason is, because the uneasiness necessarily attendant on it, then ceases; and future, expected happiness is changed into, or becomes real, present happiness. And the disappointment of desire is attended with uneasiness, because we want, or fall short of, what we

reckoned a part of our happiness; and the want of apprehended happiness must, of course, be uneasiness to us. The case is this; the pleasure resulting from the gratification of desire, is in all instances suited to the uneasiness universally connected with it; this uneasiness is ever according to the violence of the desire; and the strength of desire is constantly as the object desired is judged to make more or less a part of our happiness. Consequently, the pleasure of gratification will be always proportioned to the degree in which the object of desire is connected with our happiness, or effective of it.

14. Though the pleasure of gratification flows from the removal of the uneasiness attendant on desire, and is in proportion to the degree of it, yet, the pleasure in the enjoyment of the desired object is not solely in proportion to the height of such desire, but partly to it, and partly to its capacity of producing pleasure in us; nothing being more common than to hear men complaining of things balking their expectations, and not answering in the event one half of what they promised themselves. The same is true in respect of pain, which is ever in proportion to the degree of ill in the object, and not to our aversion from it; it being an unquestionable fact, that there is a certain fixed invariable degree of good and ill in every object (capable of differently affecting the sentient principle) which neither the strongest desire and aversion can possibly encrease, nor will the weakest diminish it.

15. Effects will be ever proportional to their causes, both as to kind and degree; consequently the more intense the soul's sensations are, the greater tendency to motion and action arises from thence, as also, the more strongly the nerves are

impressed *ab extra*, the more intense sensations are produced in the soul. And thus the case ever will be, whether we consider the former or the latter as the efficient cause of the other.

16. Those above are the most material modifications of mind necessarily flowing from a view of involuntary means of happiness and misery, which, we have seen, are but certain feelings and sensations in the soul (ever attended with suitable, corresponding motions in the body) in respect of pleasure and pain likely to be enjoyed and endured. And from what has been said, we may gather, by way of corollary, the following truths.

17. That the power of receiving pleasure and pain from certain impressions made on the sensory by external objects, is a natural power and born with us, or, it is the necessary effect of our make and constitution.—

18. That pleasure results from an agreeableness betwixt some particular sense and object; pain from an unsuitableness or disagreement of object with sense; or in other words, that certain motions of the nerves excited *ab extra* are productive of pleasing and agreeable, and others the cause of disagreeable and offensive sensations, in us.—

19. That there is not only a difference in the powers external objects have of exciting pleasing and disagreeable sensations in us, but also in our capacities of receiving and continuing those motions which by the Author of Nature are constituted the occasions of them; some objects being found in fact to produce greater, some less degrees of pleasure and pain to us, varying according to the difference there is sometimes in the object acting, at other times in the subject acted upon; a difference of susceptivity in different men constitut-

ing desires and aversions of different degrees in respect of the very same objects.

20. Since the disappointment of desire is sure in all cases to be attended with uneasiness proportioned to the violence of such desire; and because the more desires beings of limited powers have, the more difficult the means of gratification must be (since those means lie oftentime out of our reach) and the more difficult the acquisition of those means, the fewer appetites, of course, will be gratified, and consequently the higher must the sum of our uneasiness rise, therefore, it must be the interest, and from that consideration it becomes our duty, to contract the number of those desires, or rather, not to suffer them to arise at first; in doing which we shall make our happiness less dependent on things without us, whose possession so many times is thus hazardous and uncertain.

21. Since all pleasure flows from an agreement of object with desire, and is in all instances in a compound ratio of the degree of good in the object and the strength of the appetite, or directly as the powers of producing pleasure in the object, and our capacities of receiving it, the consequence is, that the stronger the appetite, or the higher it rises (an adequate, correspondent degree of good being ever supposed in the object) the greater in the enjoyment will the pleasure be. Whence it appears, that men of the fewest, but at the same time of the strongest appetites, must be the happiest, supposing only the means of gratification certain.

22. If one would speak with propriety on the subject, I should choose to call that pain arising from the disagreement of object with desire, positive pain; the first contriver of all things having fixed a law to our desires of the same nature with

those to which the material system is subject; and such as cannot be any ways altered without either changing the essential qualities of external objects, or making the organs of sense in human bodies different from what they now be. Such is the settled, immutable relation betwixt one and the other, the disagreeable sensations arising from certain motions impressed *ab extra*, being according to the order and appointment of the great Creator, and what, like cause and effect, are fixed in the natural course of things. And the pain attendant on the disappointment of desire I would call privative pain, as it arises from the privation of a certain happiness supposed to have been attainable by us. And betwixt those there is a difference as well in kind as in degree, the suffering a real evil being the cause of one, and the want of what we apprehended to make a part of our happiness, the cause of the other. And where the causes are unlike, the effects cannot be the same. Agreeably to this, the pleasure arising from the enjoyment of the desired object may, for distinction sake, be termed positive pleasure; and that flowing from the gratification of desire (if the two pleasures can be conceived apart) derivative, anticipating pleasure; because desire on whose gratification the pleasure is founded, flows from the notion of some particular thing making a part of our happiness; and when desire is gratified, future expected happiness is, as we before observed, changed into, or then becomes real, present happiness.

23. It will not be improper to close this section with an observation on the present scheme of things, which is found in fact to be such, that the same objects, actions, and events, which produce pleasing, agreeable sensations are, (or the greatest

part of them at least) preservative of our beings, and without which we should either immediately cease to exist at all, or to exist in the manner we now do; and those which produce painful, disagreeable sensations are, if applied in a certain way, and to such a degree, destructive of our beings. And this shews, in an eminent manner, both the wisdom and goodness of our Creator, in annexing pleasing sensations to the enjoyment of such things as make for our continuance in being; and disagreeable, offensive sensations to those which have the contrary tendency: (forasmuch as prior to experience, or to the effects which external objects are seen to have upon human bodies, reason from a contemplation of our own natures, or from a survey of the natures and properties of things around us, could never have discovered a greater congruity and fitness in the application of some than others to such bodies as ours; or that the same thing which gives us pleasure should at the same time tend to our preservation; and what gives us pain to our destruction;) that we might be allured by the prospect of the pleasure they yield us in fruition to the pursuit of such objects as are necessary to continue us in our existences, when we either do not make, or are not capable of making, just and proper reflections on their tendencies to this end.

SECTION

SECTION IV.

SUPPOSING our happiness or misery wholly depended on inanimate things as the proper causes of them, our approbation and disapprobation with the concomitant agreeable and disagreeable sensations, would be in order and degree as described in the last section. But since both one and the other are in great measure founded on the acts of those who are perfectly free in the choice they make of concurring, or not concurring, with us to this end, after enquiring into the ground and rise of each it will, I presume, appear, that men's approbation and disapprobation, love and hatred of beings *intentionally* contributing to their happiness and misery, are essentially different from that approbation and disapprobation arising from *involuntary* means of happiness and misery; as shall now be made out.

2. A, for instance, perceives his happiness in some particular respects to depend upon certain actions of B to be performed in his favour; therefore whatever tends to obtain this performance, or to induce B to it, is a means of that which is itself a means of happiness, and included with the other in his approbation of it. But A and B, being born

free and equal, A can have no more claims upon B for his kind offices than B hath reciprocally upon A; reason therefore dictates, and experience shews him, that the most likely means to bring over B to his interest, that is, to undertake an action with a view to serve him, is to shew a disposition to return that kind action with another. And this is very observable in children, who to engage us in their favour when they want us to oblige them in any particular thing, designedly practise upon us all the different arts of pleasing they can readily think of, and industriously strive to shew themselves in the several little affecting attitudes and endearing methods of behaviour they can gracefully put on, the better to dispose us to gratify them in their requests. And what reason, or instruction first taught them the expediency of, custom afterwards renders easy and familiar to them. And though this disposition will not immediately arise upon our mere willing of it, yet when we once come to consider it in our several intercourses with others as a necessary means of happiness, that consideration alone, if not immediately, will, in time, excite it; that is, we shall be necessarily disposed in this manner towards the person from whom we either have received, or are in expectation of receiving, offices of kindness, when such disposition is judged to be the procuring or preserving means of them. This disposition of mind therefore considered as a means of future, will necessarily be attended with present pleasure. Whence we gather this truth, that our approbation of voluntary means of happiness differs from approbation of involuntary ones in this, that the former necessarily implies a disposition in us to promote the happiness of those who have con-

tributed towards ours; not so the other, which terminates in possessing the object desired.

3. It is proper to take notice here, that this disposition implied in our approbation of voluntary means of happiness, is originally founded on a sense of private happiness, till after many repetitions we are insensibly led to approve moral characters, even when our own happiness and the means of it are no ways concerned. The idea, or recollection of voluntary means of happiness, constantly producing in our minds an approbation of them, or that particular sentiment and disposition of soul we ever mean by the term approbation, the reason of which will be given hereafter, as the reader sees it hath been in part already.

4. Since the gratification of desire is ever attended with pleasure suited to the degree of it, and because the disposition or desire of promoting the happiness of voluntary means is associated with our approbation of them, we hence learn also this other truth, that we shall not only desire, but shall actually take pleasure in, the happiness of those means, a circumstance which never accompanies our approbation of involuntary means.

5. Since it lies as much within B's power to promote A's misery as his happiness, all that human foresight and application can do to guard and secure him from it, is to use such methods of acting as naturally tend to restrain B from it. But reason teaches, and experience will shew him, that the most probable means of succeeding in this is to shew a disposition of returning like for like. Whence we see, that disapprobation (necessarily consequent upon the apprehension of enduring evil) of voluntary means of misery differs from our disapprobation of involuntary ones in *this*, that it ne-

cessarily infers a disposition of producing the misery of those who have designedly made us so, or who have been willing in sentiment and intention to have done it.

6. This disposition or desire, implied in our disapprobation of voluntary means of misery, is likewise, we see, originally founded on a sense of private happiness, or more properly, on a view of avoiding misery, till after much repeated disapprobation we come of course to disapprove all immoral characters, or voluntary means of misery, though our happiness be neither liable to be impaired nor our misery encreased by them, as will appear more fully afterwards. From the above we gather,

7. That the difference betwixt love and hatred of beings intentionally contributing to our happiness and misery, and our love and hatred of *purely* involuntary means, consists in *this*, that the former implies a desire of, and therefore a pleasure in, the happiness or misery of the object beloved or hated, accordingly as such being hath voluntarily made a part of our happiness or misery; but the latter only regards the possessing or avoiding the object beloved or hated, and looks no further.—N. B. Though it is asserted above how reason shews, and experience confirms, that some particular modifications of mind were necessary for procuring happiness, others for avoiding misery, yet the fact generally is, that we are taught by others at first to shew such dispositions on certain occasions, and not to form them ourselves from any necessity we conceive ourselves under, either from reason or observation so to do; though, as we advance in years, the former points out to us, and the latter vouches, the seasonableness of annexing such dispositions to certain particular acts of our own and

others. And it is the same with regard to our general doctrine, whether we make them ourselves or have them from others; since in either case they are acquired.

8. We are now furnished with an answer to the ingenious author of the Enquiry into the original of our idea of Beauty and Virtue, when he asks, as he does in page 118, "what should make "this difference in our approbations, if all appro-"bation or sense of good be from prospect of ad-"vantage? Do not inanimate objects promote our "advantage as well as benevolent persons who do "us offices of kindness and friendship? Should we "not have the same endearing sentiments toward "both? Or only the same cold opinion of advan-"tage in both." We have given above the reason of those different approbations without being obliged (as this author supposes) to have recourse to an innate moral sense, or a certain natural determination of the mind, in order to account for this difference. But to proceed.

9. Mankind, by the constitution of their being, are determined to pursue happiness and to shun misery, as we have shewn above; and for enabling them to do this, God, who in all his proceedings shews he ever consults his creatures happiness in the best manner possible, hath given them understanding to direct them to such objects, actions, &c. &c. as are fitted to procure the one, and to prevent the other. And experience lets them see, that, as dependent creatures, and of limited capacities, a great part of their happiness will arise from the regular and social, as a great part of their misery from the untoward and perverse, concurrence of each others acts. Reason therefore tells them, that coming into the world with the same

natural powers, and, which is more, with an equal right to the exercise of them, no one individual can have a right to offices of kindness from others which those others have not as much right to from him in return, that is, they have all a right (provided they act as reasonable beings were designed by their Creator they should act) to one another's assistance in promoting each other's happiness alternately. Whence supposing them constituted in a manner that A shall have the same reasonable expectations of favours from B as B hath from A, it necessarily follows that A hath the same right to B's favours as B hath to A's. Consequently, whoever acts with a view to another's happiness, in so doing acquires a right to the means in that others power of contributing to his again, that is, (for I would be always understood so to mean) on condition they act conformably to their Creator's will, or as Beings who, he intends, should secure their happiness in the most effectual manner. And what reason requires should be done, are we by constitution led to do, (though this constitution be of our own acquiring,) for I must ever look upon as a means of happiness, and approve, him, who promotes mine though in this he has his own principally in view, that is, proposes to excite me by such particular act of beneficence to pay the same regard to his happiness when he shall have occasion for it, and myself be in circumstances to shew it. And approbation of voluntary means of happiness implies in it, as hath been more than once observed, a disposition of making those means happy in return.—And though there be (which proves the source of much disorder and embarassment as to conducting human affairs on a principle of right) a great, still it is hoped it is not a general,

deviation in practice from this rule, yet, as a conformity to it tends in its natural consequence to mutual security and happiness, on this consideration it makes for the general interest of mankind to enforce the observance of it upon all without distinction by such arguments as reason and common experience will suggest. And from hence, as will appear more fully by and by, arises the almost universal approbation of such a conduct, *that is*, of receiving and returning acts of munificence amongst all orders and conditions of men, beginning in the early years of infancy (being so taught by those who have had the care of their bringing up) and continued through the several intermediate states of youth and mature life down to the latest of old age. Hence this corollary,

10. Whoever performs an action with a view to obtain some certain end, hath a right to the end for which such action was pursued: and consequently every action merits that for the acquiring which it was first undertaken—This on supposition that those acts are directed in conformity with the intention of the Author of Nature; and not otherwise.

11. The difference betwixt our approbation and disapprobation of voluntary and involuntary means of happiness and misery, and from whence this difference arises, hath been shewn above. That particular thing therefore (be it quality, mode, or adjunct) which entitles A promoting B's happiness to B's approbation, *that is*, to a disposition in B (included, as before, in the approbation of voluntary means of happiness) to a disposition, I say, in B of returning A's kind action, I call the merit of A, or rather the merit of such an action. Merit therefore is the right we have to the appro-

bation of others from our voluntarily contributing to their happiness, though it be in order to influence them to use the like good offices toward us in return.

12. Though our desires and aversions for any object, action, and event do not directly rise upon our volition of them, yet if that particular object, &c. be once considered by us under the notion of a means of happiness or misery, such consideration (if no *prior* contrary association intervenes to prevent it) will by degrees excite desire or aversion as such object respects either one or the other. For, agreeably to a former observation, whatever is supposed to make a part of our happiness and in our power to obtain, *that* we must desire: and whatever is likely to make a part of our misery, *that* we shall necessarily have an aversion to. Such desire and aversion are immediately consequent upon our make and frame. But, as an exception to this, (which was the reason of inserting the foregoing parenthesis) it must be observed, that having once formed our minds, by association, to the liking of voluntary means of happiness, and consequently to the love of justice, truth, faithfulness, &c. it is not possible we should approve a breach of those moral qualities, or love the agent, though our own happiness be promoted in ever so great a degree by it; because it is both absurd and contradictory to suppose, that two opposite affections and tendencies of *will* should subsist at the same time together, but that one will be a negation of the other. And were this consistent, which it is not, yet two contrary and opposite determinations of minds, like contrary and opposite motions in the body (which possibly they may be the cause or effect of) encountering each other, will, if their moments be

equal, destroy one another; if unequal, the stronger will overpower the weaker, and its remaining force be the difference, or excess of one above the other.

13. It hath been shewn, how the notion of voluntary means of happiness, when reflected on, produces in our minds an approbation of them; a love of the agent; and satisfaction and complacency in his success; and that the consideration of voluntary means of misery produces in the mind quite contrary effects, contrary sentiments and dispositions towards the agent. It hath been likewise shewn, how our approbation and disapprobation of those means is originally founded on a sense of private, personal happiness, though we afterwards approve and disapprove *characters*, love and hate *moral representations*, *virtuous* and *vicious forms*, and *certain species of public good or ill*, without any respect had to or connecting them with our happiness, which is no ways concerned in exciting one or the other, the reason of which has been also given above. Whence we gather, that though no affection of any kind can originally arise from any other source than that of self-love, yet may we have the *desire of the happiness of others, without conceiving such happiness as the means of ours*, contrary to the opinion and express assertion of the author of the Essay upon the Nature and Conduct of the Passions, who maintains (page 18th, 19th,) that if this were the case, that is, if our approbation and disapprobation flowed solely from this fountain, *we might then be hired to love or hate any sorts of persons, to be angry, jealous, or compassionate as we can be engaged into external actions*, since, as we took notice before, no two contrary affections

can exist at the same time; or, in other words, that when love or hatred towards any character has once taken possession of the mind, its opposite can have no place there. For I must repeat it again, that though approbation and disapprobation, love or hatred, can at first proceed from no principle but that of self-love, yet have we shewn how we may, and actually do, love or hate characters without once considering our own happiness as any ways, or in any degree, promoted or impeded by them.

14. Gratitude, shame, anger, &c. are so many several modifications of mind, taking their rise from the natural tendency each of them is apprehended to have to the promotion of happiness, and the prevention of misery: which different states the mind voluntarily (though the sensations attending those different states, with the consequent active habits formed upon them, be necessary and unavoidable) which states, I say, the mind voluntarily puts herself into, or she annexes them to certain particular actions, as the probable means of acquiring pleasure and avoiding pain. And this may be accounted for in the following manner.

15. When I have received a favour from another which I had no pretensions to, the most likely means to continue him in my interest, as also to engage others into it, are to shew by some outward act a willingness of returning the favour in a way most acceptable to my benefactor; and by connecting this propension of the mind to the idea of a kindness received, they become in such manner associated, that we can never read, hear, or think of one without being affected with the other, and disposed to shew it; that is, the idea of a favour received, or the pleasure arising from the reflection

upon it, is ever attended with that particular modification we first annexed to the receipt of good offices. And it is this, and nothing else, which has given rise to that received opinion among moralists of there being a manifest congruity, or, in the language of others, a certain moral fitness betwixt our ideas of bounty and gratitude, from which fitness, or agreement of ideas, results men's obligation to acts both of one and the other; but whatever obligation men may think themselves under to be grateful, it is wholly owing to this association which we either make ourselves, or learn of others.

16. It deserves to be taken notice of, that there is a pleasure usually accompanying this particular modification we shew towards our benefactor, distinct from such modification, and founded on the view or expectation of him, or others, interesting themselves again by means of it in our behalf. For that this pleasure is not the same with the disposition, or a sensation attending it as a proper cause or effect, is evident from hence, that supposing B to have done A some good office, but with assurances at the same time of his intention not to concern himself any more in regard to him or his happiness, in this case A indeed may manifest such a disposition as before-mentioned, or a behaviour in every respect suitable to it, (and reason will tell him it is necessary he should do so, in order to influence others in his favour) yet will he feel no pleasure in expressing that, his gratitude, or have any great affection for his benefactor. The persuasion most men are taught to live under, of it being at all times their duty to promote the happiness of all within their reach, gives them a right to such

expectations, and makes them dislike and condemn a conduct which interferes with those views. The truth is, the pleasure we experience in gratitude is wholly grounded on the supposition that our benefactor has our happiness as much at heart as ever, and when any such opportunity offers will pay the like regard as formerly to it. For as we have shewn above, the means of happiness, whenever viewed by the mind, have a present pleasure attending them proportioned to the quantity expected in possession.

17. When a man has *designedly* done me a diskindness, either by impairing my happiness, or in hindering the further advancement of it, or with breaking in upon my rights of one kind or other, if I would deter such a one from repeating the like, it is necessary I shew a disposition of making reprisals. And by joining this propension of mind to the idea of an injury received, we are sure to shew it upon every intended slight or offence which is offered us. And this modification of mind I call anger, which is always accompanied with painful and uneasy sensations on account of the injury done us, that is, for the pain we suffer, or the happiness we part with. This association, if kept within proper limits, is of admirable use in a system of beings capable of injuring each other, and who are oftentimes led on by inclination, and more commonly by interest, to do it, on account of frequent interferings of desires in respect of the same things. —This disposition, when continued long after the occasion of its rising is past and over, or when the object of it is ready to make us suitable satisfaction for the damage we have sustained, at the same time offering proper security for his future behavi-

our, is called revenge. A disposition the most hateful, as it is the most destructive in its consequences of any that is formed.

18. Since our happiness depends in great measure on the concurrence of others, and since nothing can induce them to concur with us to the acquisition of it so much as the esteem they have for us, and as this esteem is chiefly obtained by our good name, or the reputation we hold in life; therefore the acquiring or losing a good name, &c. is, in effect, the acquiring or losing happiness, and very nearly in the same proportion. And to this it is owing, that persons of all ranks are so exquisitely jealous of any attempts that may be made to depreciate their character; some resolutely venturing their lives in defence of it, when it is either attacked or but liable to be so.

19. We have shewn above that all parts of the body capable of moving, or of being moved, do ever vary their site conformably to the devices and resolves of the soul; and this, by a fixed unchangeable law obtaining in, and resulting from, the present constitution of things. The consciousness therefore of being guilty of some certain vice, or of having done what is mean, base, and dishonourable, that is, of not having acted up to the dignity of our beings and of the relation we stand in to society, or below the character we bear in life, and what might reasonably be expected from us, the consciousness of all or each of those, as means of lessening our merit, and so losing us the esteem of others, joined to our desire of shewing a suitable resentment against such practices, and our concern for having been engaged in them, this state of mind, I say, with such perturbations and purposes, will necessarily be attended with motions in the

body answering the nature, quality and degree of them. And this is what we call shame; which always discovers itself on the commission of any enormity likely to be brought to light—Any one who has been conversant with children, and attended to and remarked upon the rise and growth of associations in them, and the means they use, in the various acquirements they make, may easily trace out the time when this passion begun to shew itself, and how and in what manner it first operated. For, before they are taught it, or shewn the difference there is in actions, they seem perfectly indifferent both to shame and its contrary.

20. There is an uneasiness in shame distinct from that *concern* reason enjoins, or, rather, which we are taught to shew by an exterior significant behaviour, founded on an apprehension of the vicious act losing us the esteem of others. For the loss of happiness (as we have shewn) must be present pain and misery. And therefore the loss of esteem (which is a means of happiness) must necessarily be attended with uneasiness proportioned in degree to the esteem it loses us.

21. The reason of making this modification at first attendant on any vicious act is, we see, in order to preserve the esteem of others, apprehended as a mean of happiness, and which we are likely to lose by such particular act: consequently, when men pay no regard to this esteem, and are indifferent whether they have it or have it not, the association gradually weakens, at length totally subsides, and another of a contrary nature and quality takes its place. And this is the case of those who go uniformly on in a course of fraud, lying, debauchery, or any other species of naughtiness, without feeling any check or controul from the virtuous

principle intended by our Creator to be acquired by us as we advance in years. And such whose wills are obstinately bent towards mischief, and seem incapable of being reclaimed, are in common language said to *have lost all shame.*

22. It has been observed above, how a great part of our happiness and misery (arising from the acts of others variously affecting us) follows their esteem and disesteem; this esteem and disesteem, as hath been likewise remarked, depends very much on our good or bad character in life. This character is founded on our doing publicly useful, laudable, &c. actions, or the contrary. Add to this; that heroic courage, or an undoubted resolution to defend ourselves and the society (of which we are members) from the unjust attacks of its enemies; and an inflexible adherence to the interests of virtue, in all difficult instances, and under many trying temptations of apostacy, are truly great and beneficial qualities, and, in this view, will necessarily entitle us to large measures of public esteem. Hence the strong desire of being possessed of such sentiments and principles, and by consequence, of being thought the authors of those actions which, in the nature of an effect, flow from them, as also of shewing a suitable resentment against those who seize every opportunity of ascribing the contrary ways of thinking, determining, and acting to us. And on this is founded our sense of honour, which, in its proper acceptation, denotes the right we have to the esteem of others for the services we have done, or are in capacity and disposition of doing, to mankind at those particular junctures, or when certain circumstances render such offices of ours both seasonable and necessary. For the truest bravery ever consists in *timely* adapting those serv-

ices to the *pressing* exigences of the society to which we belong, and in directing all our pursuits to the promotion of public happiness without any deviation, if possible, whatever.

23. A, by his situation in the world, finds himself liable to many cross accidents and sufferings, arising either from the natural course of things, or from the unsociable, inconsistent behaviour of voluntary agents. He finds it also very much in the power of his fellow creatures to contribute towards his relief in those circumstances. But since A hath no room to expect others should pay any regard to his afflictions, unless he shews some concern for theirs, with a disposition to relieve them; reason therefore bids him, or, as it commonly happens, he is taught to join this disposition of mind to the sight, hearing, &c. of the miseries of others. And, the association now made, A can never think of those distresses without being affected by them, that is, the sight, sound, or reading of the miseries of others, or a review of them in our minds, produces that particular sentiment, disposition, &c. which either reason recommended, or we were instructed to manifest upon such occasions. This disposition is constantly attended with great uneasiness, with much sorrow and dejection of mind on account of our being so many ways subject to the same common sufferings: the thought of our own liableness to the like misfortunes, creates in us great concern, and many suspicious fears, at such spectacles of woe and misery.

24. The reader is desired to take notice, that a difference in the sight, hearing, or recollection of a word, causes a different motion of the nerves, and consequently a difference in the sensation produced by it. Thus, for instance, our pity and compassion,

and the motions in the body answering to them, ever vary according to the light in which the miserable object is seen, heard, or reflected on by us —Most people, I believe, come by this association in the following way: a child at the first sight of a person in distress, seems affected with surprise and astonishment, more than pity and compassion, at the object before him: the uncommonness of the phenomenon strikes the young tender mind with a mixture of fear and wonder. This is one of the primary passions in the human soul, which ever shews itself on the first appearance of an unusual object, or of some unusual circumstance attending it. But endeavour to make the child once understand what the other feels, explain his case the best you can to him, and tell him to bemoan the distress he sees and be concerned for it, and lastly, let him be made acquainted that as he is exposed to the like disagreeable occurrences, so, if he does all he can to lessen the griefs of others, they will use the same endeavours to ease him of his; and you *thus* lay the foundation of an association, which, by like continued repetitions, strengthened with the reflections he makes on its expediency, as he advances in years, becomes at length perfectly completed.

25. I might go on to instance in generosity, ambition, envy, and all the other various determinations of mind, whatever names they go by, and shew that none of them are, as some pretend all of them to be, originally implanted in our nature, but are of our own acquiring, and purely an effect of the work of the understanding, or, which is generally the case, what we have been taught by others. They are certain dispositions of mind which reason, or the practice of others bringing us by degrees to

an imitation of the like, shew us were necessary to be joined to certain actions, in order to influence the behaviour of others with regard to our happiness and misery; which connection ever after subsisting, hath been the occasion of some men's thinking, and of others maintaining, that our minds were naturally pleased with certain actions, and displeased with others, prior to all consideration on the effects they led to; forgetting that we had formed and fashioned them so ourselves. But in attending to the manner in which we have hitherto proceeded, the reader will be directed to the true origin, nature and extent of all our desires and aversions, with the various modifications of each, whether respecting voluntary or involuntary means of happiness and misery.

26. The doctrine of association, as explained above, enables us also to account for order, beauty, parental affection, love of virtue, and the like, without presupposing, in the words of the author above-cited, a certain innate moral sense as necessary to solve the principal actions of human life.

27. Upon observing certain forms and situations of things to be more conducive in their kind to private happiness than others, arises our approbation of them; and from this approbation, necessarily connected with every real or apprehended means of happiness, results the pleasure we take in them, that is, the means of pleasure have a present pleasure, &c. as above. And they and pleasure being associated, we cannot view such forms without being agreeably affected with them. And we are not only pleased with the proportions and arrangements of things which make for our own private happiness, but also with those which tend to the good of that society to which we belong, or

the perfection of the system of which we are parts. The reason is, because our happiness, as a particular, is contained in that of the whole. And by reason of those forms and pleasure ever keeping together, are we, by degrees, insensibly led to abstract the order of things from their conveniency, and to make order something real and independent on our sense of happiness, or what gives pleasure absolutely and of itself. Whereas in fact it receives all its force and efficacy on men's minds, from a consideration of its tendency to private and public conveniency connected, as a means, with private and public happiness.

28. Should it be asked, supposing the delight we feel from the contemplation of order be originally founded on a sense of public utility, whence comes it that we are so agreeably charmed with the sight of magnificent palaces and majestic edifices, when those of less extent and charge might be every way as convenient and equally answer the end, it not being the magnitude, but the site of the various parts, their relation to, and dependence on, each other, which constitutes the conveniency of any particular form? Does not this then seem to shew, that we have a taste independent on, and in some cases distinct from private utility? But this I presume may be accounted for on supposition that private happiness is the true source of all approbation. The reason is this. The greater power we have, the more are we thought to have the means of happiness and misery at our disposal, or we can oblige other beings to act in concurrence with our designs. Hence the thirst after power, and, which is its immediate consequence, the desire of doing such things as are great and uncommon, or of being thought possessed of it. And this of course gives

rise to a pleasure in the performance of such acts as lie beyond the common reach of mankind. And from hence we deduce our first ideas of grandeur, majesty, &c. and being taught as we grow up to admire what is stately and magnificent, and to be pleased with these figures and adjustments of things as are connected with our greatest good, the association keeps insensibly forming till in time it receives such further degrees of strength as to settle in a confirmed habit. What is grand and uncommon never fails to raise admiration, and a regular well-proportioned form is sure to give pleasure in each successive contemplation, if not too often repeated; see article 31, section 2.

29. Be it further observed, that in forms of this size, it is not the largeness or magnificence of the parts, but the justness of their proportions to one another and to the whole plan, or their conspiration with the design of the founder, or with the established rules of architecture, which we admire; for supposing them defective in any of those views, we are no more delighted with the appearance than with the appearance of an irregular pile of building thrown together by chance, or of a heap of timber, stones, &c. amassed without art or contrivance; that is, they are approved of as means to an end. —There is one thing that makes a sensible alteration in the case, which is, an unsuitableness or disproportion betwixt the stateliness of the edifice and the abilities of the proprietor; for if the former falls short of, or exceeds, the circumstances of the other, it diminishes the satisfaction we should otherwise take in it; that is, we do not look upon it as a proper means to an end.

30. Order, site, proportion, &c. therefore, in whatever light we view them (and they are all

but relative ideas) are approved of as means to an end, which confirms the truth of our general position, that all approbation is from a sense or prospect of happiness.

31. We find by experience that certain lineaments, features, &c. are indications of certain good qualities and dispositions of mind: and having beforehand, by association, formed our minds to the love of voluntary means of happiness, we are apt to be charmed with persons at first sight, glance, &c. without once considering and having in view the end for which those features were once approved. Whence we conclude beauty to be something real, absolute and positive.

32. Most people, I believe, have ideas of certain forms, &c. in their minds, by which their future choice of things and persons is to be determined, so far as they have the means of determining in their own power. And according as those forms (which whether men frame them themselves, or being made to their hands they become fixed there by imitating of others, is not material) and according, I say, as those forms differ in men's minds, will some be pleased with this particular shape, size, complexion, &c. others with that; and to this is owing almost that infinite variety of tastes so observable in the world, that the very same things which some stile beautiful shall be construed a deformity by others. Which contrariety of opinion is a demonstrative proof that beauty is nothing positive and independent, but wholly arbitrary and relative to our perceiving faculty; which faculty likewise is of our own creating.

33. Though the Deity, in forming mankind mutually dependent on each other, causes it to be their duty to provide for each others happiness ac-

cording as they find themselves able to do it, yet does he expect that this provision be made in manner and degree suited to the nature of that dependency. Thus, for instance, parents being instruments in God's hands of their children coming into being, he requires them in a particular manner to concur with him to their well-being, or more than others of equal circumstances: and parents also, having learnt from others that it is their duty to love their children, and behave towards them in all instances suitably to what such affection implies: so in annexing this disposition of mind to our children's little interests, and our carriage towards them, the idea of them never occurs but with this disposition attending it; and dropping out of their minds the ground, motive, or principle on which their desires after their children's happiness was first founded, parents esteem the affection natural and act from it as such. Add to this, the consideration of their being derived from, and so, in a sense, a part of ourselves, and that after we are gone we shall live in the posterity we leave behind us, such like reflections as those, I say, greatly strengthen the association, and the concomitant sensations become proportionably more intense.

34. It deserves our further notice, that the returns which children make as they grow up, and they expressing their gratitude in a manner suitable to their tender years (which from their infancy they are taught to do) or, in other words, that the sense of kindnesses alternately received and acknowledged, and the current of good offices and grateful dispositions continually reciprocating, mightily endear parents and children to one another; encrease the quantity of love, of tenderness, and affection on both sides. And the exceeding

great strength of this affection, or the height to which in many instances it rises, is thought by some an unanswerable argument of its being natural; whereas it may be accounted for from an association of ideas.——That this supposed innate affection is, in fact, adventitious, and only the effect of an association, is further confirmed by the fondness and endearing arts of behaviour of nurses, and of such as have adopted children for their own, whose affection and tenderness in behalf of those under their care, is as great as if they had been really descended from them, and many times greater than that of parents towards their offspring. But few there are, I believe, who have not both seen and read of such instances as those.

35. Knowledge being necessary to shew what particular actions conduce to happiness, and what not, and to point out the different tendencies and relations which different things have to one another, produces in our minds an approbation of it; for that which discovers to us how such an end may be obtained, is itself, in the nature of a mean, and consequently will be approved by us; approbation, as before, includes a desire of it; desire an application to it; application produces a discovery; and the discovery (because desire is gratified, and a means of happiness obtained) is accompanied with pleasure. Hence the connection of pleasure with knowledge. And to this association are we indebted for all these amazing discoveries and improvements, which from time to time have been made in geometry, physics, morality, &c. and which will be continued on yet to greater degrees of perfection. To this we owe a Newton, a Clark, a Locke, a Wollaston and a Warburton, whose writings will ever be in the highest esteem so long as

good sense and a taste for literature are to be found in the world: the pleasure attending the discovery of every *prior* unknown truth constantly engaging the mind in fresh enquiries, and leading her on after new acquisitions.

36. It is proper also to observe, that man at his first setting out in search after knowledge, does it not so much for the sake of its shewing him the road to happiness, as its being, by the common practice of the world, made a means of happiness itself. And it is with a view to this that most men, I believe, engage at first in their pursuits after it. For the further advances a man makes in any particular science, the greater esteem he acquires, and the more merit he has in the eye of the world: and these are certain steps to happiness.—There is one thing further I would also take notice of, that the more important the truth, or the greater the difficulty in its investigation, the more exquisite the pleasure which results from the discovery; the reason is, in such cases we think ourselves entitled to larger measures of public esteem, or the greater our merit is, the consciousness of which will be attended with proportionable pleasure.—Not to mention that knowledge, considered *abstractly*, is by some thought to be the proper object of an intellectual nature. But of this hereafter.

37. In this manner also we acquire a taste for architecture, painting, engraving, music, and the like; those, as all kinds of arts and sciences, were first pursued under the notion of means of happiness, till by association they became identified in the manner described above, and the means were turned into ends, and influence us accordingly.

38. The same may be said of our approbation of virtue in general, or of any particular species of

it. If men would live in ease and quiet to that degree as to obtain the end their Creator had in forming them, it is necessary they be secured from violence and oppression on the one hand, and that they have the current of each others acts flowing in their favour on the other. By reflecting on the natural tendencies and impressions, which certain actions make upon the minds of voluntary means of happiness and misery, man finds that in providing against the former, no pursuit or method of acting so likely as a strict observance of the principle of right in men's various intercourses one with another: the general practice of benevolence in its several branches can alone effect the latter. Hence our approbation of those qualities as the surest means of promoting and preserving happiness; and hence the pleasure we feel in being possessed of them ourselves, as also in seeing them in the possession of others. And pleasure and they being thus connected in our minds, the association ever after continues. And being taught from our infancy that it is the will of our common parent we should, according *to our sphere of acting*, provide for the general happiness, which, in his appointment of things, is found to depend absolutely on the exercise of all the various branches of virtue, the association grows stronger, and the pleasure proportionally encreases. And as it is undeniably the interest, so has it been inviolably the custom of all legislators to enforce the practice of those virtues upon mankind; to speak in their praise and commendation; to annex pleasure, reputation and honour as rewards properly due to them; to love the agent and to behave towards him in a way suitable to what such affection imports. And to

this it is owing that we are so delighted in reading acts of heroism, and hearing of men's inflexible adherence to the interests of virtue in the most trying instances, even when our own happiness is in no shape liable to be affected by them.

39. Our approbation (with its concomitant pleasing sensations) arising from being possessed of goodness, faithfulness, justice, with the several other moral qualities of less significancy and consideration, or from a contemplation of the exercise of them in others; and our disapprobation (with its attendant painful sensations which ever follows a sense of the violation) of those duties; this approbation and disapprobation, with their concomitant sensations are, we see, primarily founded on a prospect of happiness; and the consequent modifications, love and hatred, owing to an association of ideas either of our own making, or such as we have learned from those whose duty it was so to form and model our natures as we became capable of it. Which pleasure and pain, connected with our approbation and disapprobation of certain moral qualities, or the contrary, may in a secondary and less proper sense by styled rewards and punishments from the Deity, as he hath given us such a nature, related us in that particular manner to things around us, and so situated us among them, (and whose will it is that we ever act conformably to what such nature, relation, and situation shall require) as makes it necessary for us to form those associations in a manner agreeable to our dependent state. And in this view, they actually infer God's administration of government over the moral world by the distribution of present rewards and punishments; agreeably to the old maxim, *quicquid est causa causæ est causa causati.*

40. And pleasure ever accompanying the possession of those moral qualities, hath given occasion for some writers to ascribe an immutable fitness, an inherent worth, amiableness and excellency to the exertion of them; maintaining they oblige the Deity to act in agreement with them, though as superior to every thing or being whatever, he can suffer no compulsion or restraint of any sort; and that they likewise constitute a law of nature to man, who, whether we consider him in his sensible or rational capacity (though in considering him agreeably to what he is he properly falls under the notion of a compound) can have no other end in his pursuits but his own private personal happiness, or what appears to him to be such. And, to speak the truth, goodness, veracity, faithfulness, and the like, are but abstract ideas of the mind denoting the several ways of acting which God, in the present constitution of things, hath bound upon his creatures, or made it necessary for them to observe in order to be happy; and do receive all, or most of their intrinsic loveliness and binding force from an association of ideas, sometimes made voluntarily, at other times arising out of our circumstances.

41. We are now also able to account for that *internal* obligation, we are by some supposed to lie under to the constant practice of those virtues, independently on all consideration of their being accessary to our happiness, which, I will venture to affirm, is only the effect of an association made in favour of virtue in general, or of some particular derivation from it. The fact is, we are so constituted as to have it in our power to acquire certain associations, or rather those associations grow upon us as we advance in years, which laying a bias upon the mind, we cannot so far withdraw ourselves from

it but that in going against it, or in not conforming to it, we condemn ourselves for so doing, or are uneasy upon it. And from this, and no other source, results the obligation they talk of.

42. It now falls properly in our way to take notice how one kind of pleasure is the cause of another, superior and better adapted in its nature to the rising, governing faculties of the mind; and this the cause of another, and so on, each succeeding kind surpassing the source from whence it flowed. Sensible pleasure is what we all first perceive, and is the basis on which the succeeding kinds are laid. The power of perceiving it is truly natural; and the pleasure is the necessary effect of our make and constitution. The pleasure itself results from an agreeableness betwixt some particular object and organ of sense. To find out this agreeableness of one with the other; and to see that no appetite be indulged so far as to be productive of prepollent evil, or inconsistent with the gratification of another more important; to do this, I say, is the proper province of reason, as it was the intendment of our Creator in conferring the intellectual faculties on such an order of creatures. The exercise therefore of those powers, in the acquisition of such truths as relate to our own happiness, will be accompanied with present pleasure, that is, the means of pleasure have a present pleasure, &c. which pleasure attending the discovery of particular truths, engages some men's pursuits all their lives long, even when that esteem which such knowledge was designed at first to procure is not attended to, or thought of. This is confirmed by multitudes of instances. Here then is another sort of pleasure, the issue and effect indeed of some principle in pursuit of sensible pleasure, but differ-

ent in kind from it; and this is properly called intellectual pleasure, or the pleasure of truth, which is found in fact to be superior to sensible pleasure, though the exercise of those faculties which gave rise to it be primarily conversant about the means of attaining the other, or the pleasure of sense.

43. Mankind being created mutually dependent, the happiness of each, *as to this life*, will be best secured by his promoting theirs under the reach of whose actions such individual more immediately lies, or it will be the effect of acting conformably to justice, veracity, faithfulness, &c. The observance of those moral qualities, therefore, as means of future will be attended with present pleasure. To which we may add, that this conformity, agreeably to the doctrine of association above, will in time produce benevolent appetites, public dispositions, love of a system, &c. whence the source of moral pleasures, more excellent in their kind than either intellectual or sensible ones, and which will be pursued accordingly. And it deserves our notice, that the means of gratifying the benevolent appetites, or public affections, lie more within our power than those of any other class whatever: opportunities of doing good in one shape or other presenting themselves from all quarters about us; and supposing men's circumstances never so mean, they will always have it much in their power either to promote the happiness or to alleviate the miseries of their fellow-creatures, at some juncture or other.

44. There is another tie (stronger and more binding than any yet mentioned) obliging us to the practice of virtue, viz. the will of that being who has our whole happiness and misery absolutely at his disposal. For since nothing can recommend

us to his favour but our doing and avoiding such things as we judge agreeable and disagreeable to him, and which is much to be regarded, our doing the one and avoiding the other out of a sense of dependency on him, and with intentions to please him; so this conduct in man, or moral acts performed upon a principle of obedience to the will of God (which, in the strictest sense of the word, is religion) this conduct, I say, as it is the means of the greatest possible future happiness, will be attended with the greatest possible present pleasure. This also is another sort of pleasure, rising in exquisiteness of sensation above the other, though the principle from whence it sprouts and by which it is enobled, is, in one sense, grafted on the same stock with the foregoing; since the matter of acting is the same in both. And it happens in this, as it falls out in all other kinds of action, undertaken with a view to some particular end, that we experience a certain sublime complacency of mind, independently on all consideration of those rewards the Deity hath annexed to the performance of such moral duties, the prospect of obtaining which gave the first rise to this sort of pleasure.

45. Whilst we are upon the subject of *religious* pleasure, it is proper to observe, that no small share of the *thinking* man's uneasiness in life arises from the apprehension of what may affect him in the future part of his existence, either by the ordinary course of things, the behaviour of such whose acts may directly or indirectly relate to him, or the particular interposition of that Being to whom every thing in nature is immediately subject. And his uneasiness will ever be proportioned to the degree in which his happiness is supposed to be in

danger of being impaired or his misery encreased by them. But this is not the case of him who lives in the belief, that his future and more lasting interest is secured to him by his conduct under the moral government of God which religion teaches. For then this fear with its concomitant uneasiness ceases. And the same frame of mind, and evenness of temper shall ever continue under all possible changes of outward circumstances. And it is unquestionably certain, that the man who lives under such a sense of the divine administration, and resigns himself on all emergencies to the dispensations of Providence as just and equitable, is, of all men living, the most happy. For however present appearances be, or supposing ever so many cross accidents turn up, he is still convinced in his mind that the good man upon the whole will fare best, and that the balance will be finally on the side of virtue. And this is his comfort under all the pressures of an adverse fortune, and what keeps up his spirits and preserves him from falling into a state of despondency; and a great comfort it must, in truth, be, sufficient to bear him up against all resistances in whatever shape they may appear against him. And this is the man of God's condition. He is always calm and serene within, however ruffled and untoward things may seem without.

46. It hath been shewn above on what the difference betwixt our approbation of voluntary and involuntary means of happiness is founded, and how by association we are disposed to love the agent, and be pleased with his happiness in proportion to the good he hath done us, or hath been in disposition of doing for us. Having then, by association, formed our minds to the liking of voluntary means of happiness, how high must our ap-

probation and love rise towards that Being (provided we give due attention to him, and to his administration of government over us) who is so benevolently disposed towards the whole? And who directs all his dispensations and acts in subserviency to this grand end? And who hath so contrived our nature and our duty, that infinite happiness, or rather an infinitely growing happiness, shall be the necessary, genuine effect of finite services, if rightly performed, and proceeding from proper principles? And what complacency and delight must flow into and fill the breast of that man, who is conscious of his having acted a suitable and becoming part in the creation, and to the utmost of his power performed the several duties of his station; and this out of a sense of dependency on his Creator, and of solacing himself in his favour in return? And from acting with a view to this end man will of course arrive, by degrees, at that particular frame and temper of mind, and such habits of virtue and of the love of God will in time, *by this means*, be acquired, as shall prove necessary materials of a celestial happiness, and such a one in those circumstances cannot but be happy, though (were the supposition possible, as it is not) it should be against his inclination to be so. And the longer a rational being dwells upon the contemplation of those things, the more must he admire and be in love with the divine perfections. His goodness (the truest and most amiable ray of the divinity) justice, faithfulness, veracity, &c. which delightful employment one would think is enough to constitute his heaven even whilst he was upon earth. How beautiful and transporting, as it is a just and genuine, representation of things is this!

47. It is an observation one cannot well avoid making, that though man, in the intention of his Creator, was formed for that sort of happiness which is commensurate to, and co-existent with, his whole duration in being, and such as is best adapted to the nature and progressive state of the rational faculties, yet, by what hath been said, it plainly appears, that this happiness cannot be obtained immediately and at once; but much time, and thought, and active care are required *on his part* to come at this end. He can make but slow advances towards it, and must proceed step by step. The truth is, God hath put every man's happiness, both as to its quantity and quality, in a great measure within his own reach; and as he hath committed the acquisition and enlargement of it to his trust, so hath he given him all proper means for that purpose. A great deal of work, therefore, is left for man to do. Much attention and industry are requisite to keep the several faculties of the mind ever directed and employed in subserviency to this end. Associations must be made in favour of virtue. Habits of acquiescence in the ways of Providence, as right and equitable, and of resignation to the will of God, in all instances whatsoever, are necessary to be acquired. Some sorts of means must be turned into ends, and acquiesced in as such. From sensible pleasure he must be led to the feeling of what is intellectual; and from intellectual to the perception of moral pleasure; and from moral pleasure to that arising from the exercise of piety, and such moral virtues as are practised upon a principle of obedience to the will of God, that is, to the pleasures of religion. This is the *summum bonum* of a rational

creature, and what ought to be the *ultimatum*, of all its aims and pursuits; though, from what hath been shewn in this and the foregoing sections, it is evident he cannot arrive to it but by degrees, that is, by means of the intermediate sources preparing the way for, and laying the foundation of this.

48. The reader will probably be before hand with me in closing this section with reflections on the excellency of the present frame of things, by which man (provided he makes a right use of them) is so effectually provided with all necessary means of living comfortably here, and happy hereafter; that there is no station he is brought into, either in the common course of things, or by some event arising out of an unexpected concurrence of causes, but what, in time and by degrees, he can qualify himself for; his talents and means of acting ever rising and advancing themselves as his circumstances improve, and holding proportion with them. So true it is, that as our sphere of life is enlarged, our capacities of filling it enlarges itself likewise. Who doth not see that this description of the human mind is more worthy the Divine Architect, as it is every way better fitted for man, than that which supposes him to have certain implanted appetities, necessarily determining him to such and such actions, very unsuitable, probably, in some cases, to one in his situation! Because in this view of human nature, whatever condition such a one can be supposed placed in, it will ever be in his power to form associations and acquire habits proper for this condition. To have it therefore in our power to contract such a *kind* and *number* of them as best suit the ways of acting, and the course of life in which we are engaged, and to

be able to bend the powers both of body and mind to the various offices of our station; how much better, I say, is this than to be tied down by certain instincts and impulses to one particular set of objects, without having the ability to accommodate our desires to our circumstances, when we cannot make our circumstances rise up to our desires? That men should be entrusted with the means of framing their own natures and dispositions, and of adapting those in all cases to their distributions and allotments in life.—How gracious the design of our Creator, in sending us into the world with such capacities! And how eminently do the marks of wisdom and goodness shine forth in such a constitution!

49. By attending to the process above, a man cannot, if he would, avoid taking notice how the selfish passions convert into benevolent ones, or rather, how those affections and dispositions of mind, which from self-love were annexed to certain particular actions, come by degrees to be followed for their own sakes, or on account of the pleasure which they yield us, and so entirely influence our practice as to be acquiesced in as ends. It is, without dispute, a remarkable property of our nature (if but rightly turned at first and improved afterwards) to be ever advancing itself towards perfection, and to be laying up fresh stores and matter of entertainment for its succeeding state of being,

SECTION

SECTION V.

IT now falls properly in the way to say something about evil, and the manner of its entrance into the world.

1. If God be good, whence comes evil? is a question of long standing, and what has puzzled the greatest philosophers in all ages to frame such an answer to as ingenuous minds could with satisfaction acquiesce in. The apparent order and disorder, regularity and irregularity, presenting themselves in great variety from all quarters, gave rise to that monstrous opinion of two eternal, independent principles, of equal knowledge and power, but of different dispositions and determinations of will, being jointly concerned in the production of things; benevolence, or the desire of communicating happiness, being the primary perfection and sole exciting cause of action in one, and malevolence, or the desire of producing misery, the essential attribute and moving ground, or reason of action, in the other. The consequence was, the good Being became the supposed cause of all the harmony and happiness, the evil Being the author of all the misery and disorder, to be found in the world. This opinion (which upon enquiry will no doubt appear both irrational and absurd) many notwithstanding

easily came into the belief of, as unable on any other footing to account for the irregular appearances of many of the works of nature, and the seeming inconsistency of the dispensations of Providence with the principle of right, in many instances, which could not escape their observation. And though it be difficult (and by some thought impossible) to point out the true source from whence evil first flowed into the world, yet, it is presumed, a probable account may be given of it, which I shall lay before the reader, after having first observed,

2. That absolute perfection implies necessary existence, or a sufficiency of ever continuing the same without the concurrence of any other thing for its support; a circumstance no ways compatible with the notion of a created being, which constantly supposes dependency on that which formed it, as also on such other things with which its own existence has a necessary connection. To speak accurately on this head, it is necessary we distinguish betwixt absolute and relative perfection; since what is perfect in one sense may not be so in the other. An absolutely perfect creature is indeed a direct contradiction, absolute perfection of any kind including complete independency. But it is not conceivable how an independent attribute should exist in a dependent subject. Can the attribute be infinite, when the subject of its inhesion as well as the other attributes inhering with it are finite? This would make the attribute rise in excellence above its subject; which is just the same absurdity as to suppose that the effect may be more perfect than its cause.—In ascribing relative perfection to any thing, I would be understood to mean its being furnished with such a nature, faculties, and other means of subsisting, as are suitable

to its present state, and to the rank it holds in the scale of existence. Man, for instance, is said to be perfect in this sense, when he possesses those powers of body and mind that his situation and circumstances require he should be provided with, and which fit him for the sphere he is to move in, and with his endeavours will enable him to act up to, and answer the character of such a creature. This kind of perfection ever supposes dependency; dependency on him from whom creatures derive their existence with the means of it; and dependency likewise on such other things as may assist or obstruct them in the enjoyment of those means, as also in the exercise of the powers necessary to continue them in their present existences.

From the above we gather, 3. That absolute perfection or all-sufficiency, is the sole prerogative of the first great Cause of all things, and itself incommunicable; the reverse holds of all created beings.—The following, being self-evident truths, may be stiled axioms.

4. That which is sought and pursued for its own sake is called an end; which can be nothing but pleasure. And that which leads to or brings about this end is called a mean.

5. That which produces pleasure we stile a good; that which produces pain, an evil.

6. In ascribing good and evil to certain things, or actions, we do not take them ourselves, nor would we be understood by others to take them, for any real entities or qualities inherent in external natures, they being, in fact, no other than relative ideas; altogether conversant about means, and solely applicable to them.

7. Evil may be divided into two sorts, natural and moral; good also admits of the like division.

8. Natural evil is founded on that relation which the various magnitudes and situations of the parts of this system have to each other, or, it is the necessary effect of the different constitutions of things, when applied to one another in a certain way. Moral evil arises from the behaviour of rational creatures among themselves, and is no other than this natural evil voluntarily produced by one rational, sensible being in another.

9. Diseases, wounds, bruises, and incision, with the different sorts of infirmities affecting human bodies in various degrees, are the necessary consequents of the laws of motion, as they obtain in the material system, and therefore not to be prevented without depriving the system of that direction which bodies in motion universally take and inviolably observe; and the removal, or but the least change, of this direction would be of inconceivable detriment to the whole, as is obvious to any one acquainted with the present laws of motion, and their admirable beneficial effects in this our system. See archbishop King's incomparable Essay on the Origin of Evil.

10. Natural evils therefore are necessarily connected with all created material existences, and what cannot be removed but by a total alteration of the present order of things; therefore unavoidable.

11. If, according to the definition given of it, moral evil is no other than natural evil voluntarily produced by one rational sensible being in another, it will be asked, as it well may, how comes this propension to evil we find in the bulk of mankind, and whence that contrariety of principles which lead to contrary courses and pursuits, as the objects answering them happen to come in our way?

since it is an opinion we firmly adhere to, that the human mind originally was indifferent to, and unaffected with, the contemplation of virtue and vice, till habits of one or other were gradually acquired. To which I answer, that as our merit and virtue, so the viciousness of our nature arises from association, that is, either by making wrong associations at first, or indulging such as were right in their first formation to excess: instances of which shall be now given.

12. Ambition, anger, &c. which are dispositions growing out of certain circumstances in life, and accompanying such and such particular acts, as necessary to direct both our own, and the conduct of others, by being too often indulged acquire an incompatibility with the end for which they were formed. Anger, for example, though of admirable service in a system of beings capable of injuring each other, by frequent repetitions becomes outrageous; transports men beyond all bounds of reason and equity; and without allowing them room for reflection, and so to recover themselves, hurries them into actions many times very fatal in their consequences to all parties concerned, and thus the association defeats its own end; or, in other words, men have not so much in view deterring the injurious person from the like practices in times to come (which was the motive for forming this association at first, and the gratifying it beyond which cannot be justified) as the final ruin of the offender, who, all circumstances considered, appears to be either not faulty, or the injury so slight and trivial as it is fitting should be overlooked. The same may be said of other associations made with a view to prevent all encroachments upon men's natural and acquired rights, which many

times influence us beyond, and in some cases contrary to, the end of their appointment.

13. Ambition, when kept within proper bounds, and employed to noble, benevolent purposes, is a most useful and beneficial association; but if confined to private views, or indulged to too great a degree, becomes the most destructive of any in its effects. And as this association is capable of doing, and in fact hath done, more good and hurt (according as it is permitted to operate) to the world than any other, the greatest care ought certainly to be taken, in giving it its first bias and direction, and afterwards in guarding against all excess in the gratification of it.

14. If associations are formed at first, and operate afterwards, mechanically, it cannot be, but that they must acquire greater force, and become more influential by long use and custom. For as the oftener any body moves in the same track, the smoother it grows; and the less resistance is made to the body, and consequently the greater ease and moment it moves with; in like manner, the oftener certain particular motions are excited in the body, the greater facility either of moving or of being moved they acquire, that is, those motions, agreeably to our former observation, produce one another by a kind of absolute necessity, without, and, in some instances, against the designs and intentions of the soul. See articles 29, 30, 31, 32, section the second, where we have shewn that the sensations attending certain particular associations, will be always growing weaker and less intense, whilst the active habits formed upon them will be continually strengthening, and more and more disposing the will to action. Thus we see how associations

originally good and useful, by too frequent repetitions become destructive and ruinous, and, in so doing, defeat the end of their formation.

15. Oppression, injustice, cruelty, ingratitude, with the whole tribe of inferior vices which minister unto them, most commonly take their rise from a slight and imperfect consideration of things, generally occasioned by a too eager and immoderate pursuit after riches and sensual pleasures on the one hand, or by extreme poverty and want of most of the necessaries of life on the other. And it is the view of obtaining one, and avoiding the other at all events, which hurries men on to transgress the several duties of religion, and engages them sooner or later in a course of rapine, fraud, bloodshed, &c. so common to be met with in the history of every age of the world. It is the not living under a just and affecting sense of a Deity's animadversion, which is the cause of all the disorder and mischief that has been committed in the world.

16. It should be also further observed, that present pleasure, in determining men's election, hath much the advantage of what is future. And the reason is, either men are not fully convinced in their minds of the reality of the pleasures of another life, or they do not attend to them in a manner to be affected by them. It being demonstrative, that of two pleasures set in full view before the mind, and the probability of possessing each alike, the greater of course will be chosen; it cannot indeed be otherwise. Nor can pleasure, or the means of it be, possibly, matter of indifferency to man, as we have shewn. But the fact is, the pleasures of the other world being far out of sight, are not so much thought of nor attended to as pre-

sent sensible ones be; nor is it possible to have any notion of them, unless by associations made in their favour, we have, in this our probationary state, acquired some taste and relish for them. And if the case be thus, it is no wonder they act not with that force which the other are found to do. What is present, keeps up the mind's attention, and to a great degree prevents her from reflecting on *what is to be*. And this is one reason why motives of future happiness (which religion holds out as proper to work upon men's minds) is not in all instances sufficient to secure an obedience to the rules of virtue. Men who look not beyond the present scene, and whose affections do all centre in the enjoyment of the pleasing things of it, will not stick to break through the ties of religion, and throw down the fences of civil government; the better to make themselves masters of as many of the riches and entertainments of this life as they possibly can. The reason of which conduct may, I think, be thus accounted for.

17. Man finds himself disposed to pursue happiness and avoid misery at all adventures; he finds himself also in possession of such powers as will enable him to obtain the one and prevent the other, to a great degree at least. Supposing him therefore in quest of some certain end which he sees he cannot attain on account of another's lying in the way to it, self-love, the only implanted principle in his nature, will put him upon making all possible efforts to remove this obstacle to his happiness, and, if he cannot compass his end any other way, will prompt him to destroy that other, unless this principle be restrained by the persuasion of a Deity's superintendance, in order to reward the good, and to punish the bad, which is not here sup-

posed to be the case. And reason, according to the notion he frames of its end and office, can be of no other value than as it leads him to the object of all his wishes, happiness, and to the enjoyment of whatever good things could possibly be obtained on this side the grave. Further; supposing one man had it in his power to procure himself most of the comforts of life, and this by distressing some of his fellow-creatures, which he sees he can do with impunity, what is there in nature that would keep him from it? It is true, mankind reason not thus with themselves, nor do they endeavour to justify their conduct, by explaining it in such manner as to throw the blame upon nature, or rather, on its great Author; but it is notorious that the practice of a great many does but too well agree with the above representation. It must be owned (and I cannot say whether with more pleasure or sorrow) that there is no nation in the world whose members do not publicly profess to believe the being of a God, and as publicly own the obligation of those duties necessarily connected with their belief and notion of him. And this must be matter of joy, that mankind are no where so far degenerated in opinion but that the name of God is still retained in their mouths: but it is as notorious on the other hand (which must be the occasion of grief to every one who has the honour of God and the interest of religion at heart) that this is only a mere verbal profession, without any real, beneficial impression or good effect as to morals arising from it. And when men shew by their actions that they live under no sense of the divine administration, to what other class or denomination than that of unbelievers can they properly be ranked? Since we have no way of judging

of men's inward sentiments but by their actions and outward deportment. And of such a conduct too many instances I am afraid may be found in the world—Granting the account above to be genuine, it will be further strengthened by the following consideration, viz. that when men have once given into any particular way and habituated themselves in it, or rather familiarized it to them, such then becomes easy and delightful to them. The contrary associations in favour of virtue in general, or of some species of it in particular (if any such have been formed) yield of course to those more powerful ones; made so powerful indeed by many repetitions. And of the force of habits it is needless to say any thing, after what has been already delivered concerning them, and is evident to any one who is so unhappy as to be under the dominion of bad habits of any kind. And though the passive impressions or sensations attending the indulgence of the particular affections be always losing something of their intenseness the oftener they are repeated, yet the active habits formed upon such impressions will be continually growing more confirmed, and insensibly acquiring greater force in determining the will; as hath often been observed.

18. Further; the circumstances in which some men are born, or which they are brought into, either by their own conduct or a long run of cross untoward occurrences, are such, that if they would live, it must be by great care and taking of pains. The natural wants and necessities which all feel, though in different degrees, lie heavy upon them, nor can one of them be removed, nor the other satisfied, without engaging in, and bravely working through, a variety of hardships and difficulties, and undergoing much toil and painful drudgery.

As also submitting (which still encreases the burden) very often to such usage from those they have to do with as is far from being agreeable, and what in truth ought never to pass betwixt beings standing in the same unvaried relation to one common Parent, who careth alike for all his children, provided they pay a like regard to his will. In such a case, nothing can make those men's situation tolerable without risquing their virtue, but the lively and affecting sense of a better state of things hereafter, and the being inured to industry in a degree to have acquired habits of it, the doing which in the early years of life is of great importance to all, but particularly to those of low rank, which in every community happens to be the bulk of its members. In the degree either of which are wanting, are men so far in actual danger of deviating from the rule of right, and so of losing their innocence. And experience is ever shewing us how strangely averse most men are to labour, particularly those who have not before-hand acquainted themselves with it, and in some measure rendered it familiar to them. And with some of this complexion it will never go down; but they choose to betake themselves, and in many cases actually do betake themselves, to a course of fraud, rapine, pillaging, and the like, which as it creates infinite mischief in the world, and tends to throw every thing into confusion, so it usually ends in the destruction of themselves, as the proper, genuine effect of their own behaviour. And this is another source of moral evil and corruption.

19. To the foregoing may we subjoin the following reason, as the principal source from whence proceeds all that taint and infection of our nature which in all ages has been so much complained of,

viz. that a considerable part of mankind are trained up from their cradles in the arts of tricking, deceit, over-reaching one another, &c. which necessarily in time opens the door for crimes of a more enormous nature to enter in. Whence it is, that such strong associations are made in favour of vice in the first beginnings of life, that it is with extreme difficulty they are broke afterwards. What enters into and makes part of man's education sticks close to him all his life long, and his future conduct is generally of a piece with his first setting out. Only this difference is observable, that a foundation being once laid in childhood for raising associations upon, those particular ones which take root and spring up at that time usually become stronger and more confirmed than those of a later date, supposing an equal care to have been taken in the forming and directing of both.

20. It will probably be thought by some that our account of the origin of evil agrees not with that given by Moses, who, in his history of the creation, represents it as first inflicted for the sake of Adam's disobedience; and to be the consequence of it; by whose transgression human nature received an infection which from that time to this hath cleaved to it, and of such a kind too as renders every man at his first coming into the world necessarily prone to evil, and averse from good. In answer to this I observe, that fact is not to be disputed: the question is, are those appetites, determinations of will, &c. which may properly be stiled the mind's furniture acquired, or are they not? If they be, how can the consequence be avoided? But let me be permitted to ask, might not, on the fall, our whole frame undergo a prodigious alteration? By virtue of this alteration might

not mankind become more susceptive of sensible pleasures? which greater susceptivity, as we before observed, would occasion external objects to act with more vigour upon the percipient principle. And if this be allowed, is it not conceivable how, in consequence of this change, our compound might be disposed to acquire insensibly the irascible and concupiscible affections in greater degrees? And might not the principle of self-love thereby grow so strong as to operate in many instances with an almost irresistible force? All this, I imagine, is conceivable. It may then modestly put in its plea to be admitted as a probability; more than this it does not pretend to; less, it is presumed, will not be denied it; decently, it cannot.

SECTION

SECTION VI.

SOME moralists are of opinion that truth, and not the common good or a disposition to promote it, ever determines the Deity in his conduct; that his affection to its cause is so strong and binding, as will not admit him to depart from it in a single instance, even supposing the creation was in danger, and could not be secured without such a deviation.

1. The same great things and greater (if possible) are ascribed by other writers to certain fitnesses, relations, proportions, &c. supposed prior to, and independent on, but after enquiry will, I believe, be found subsequent to, and connected with, the modal existences of things. It will, in the first place, not be improper to examine how both truths and relations come to be formed, and whence the mind has her first notices and perceptions of them, because knowing once their origin we shall be able to declare what each of them will bear, having predicated of it; and in what sense (if in any sense either of them can be) they are a rule of action to either the Deity or his creatures. And this I shall do, having first premised the following remark.

2. That supposing the Deity should make, not the happiness of a whole system, but truth, or the relations of things, the rule and measure, as also the ground and motive of his actions, it would destroy the most amiable part of his character, and take away the foundation on which our love and reverence for him, with their concomitant dispositions, can only be justly laid, and gradually grow up to a regular, well proportioned structure, and by this means place him in the same light with mechanical causes. For whoever it is that by an act of his promotes my happiness, yet, if he had no intention of doing it, I shall certainly view him under the same prospect as I do any other involuntary means of happiness, and regard him accordingly.

3. The reason why philosophers differ so much in their searches after truth is, that they argue not from principles tried and approved by reason, but from certain prejudices they have imbibed, either in the course of their education, or by the converse they have had with others; and not examining as they keep laying in their stock of materials, whence they had acquired and picked them up, they are apt to look upon them as self evident principles, and not to be called in question. The proper way, I humbly conceive, of arriving at truth in our several disquisitions, is to trace up all our notions, opinions, ways of thinking, &c. to the time of their first existence, and to point out the manner in which we come at them, the shortest and most effectual method of getting out of an error being to know how we were first led into it.

4. We are so framed by the Author of nature, that the percipient principle shall necessarily receive certain impressions from external objects act-

ing upon the organs of sense: which impressions some have stiled ideas, in the reception of which the mind is altogether passive. And from the similar structure (similar at least to all appearance) of the organical parts of men's bodies, we have good reason to conclude that the same object produces the very same idea in all men's minds: but were it not to do so, yet as the same object always leaves precisely the same impressions upon the mind, (supposing no defect either in the medium or the organ) of every individual, when men are once agreed about a name to denote it by, they can understand one another when they talk about it, and are able to distinguish it from all others with the same ease as if the idea the name stands for had been exactly the same in the minds of all men, because A knows no more what appearance the object X makes in B's mind, than B knows what appearance it makes in A's. Allow but which, and no confusion can possibly arise from those different appearances, (supposing them different) since the name the idea goes by, will be sure always to lead them to the same object which excited it.

5. And the mind finding by experience that objects *from without* differently affect her, so those different impressions discover to us a difference in the causes producing them: in the perception of which difference consists our power of distinguishing things convenient from those inconvenient to us, and which to a great degree we can choose or avoid, agreeably to those various tendencies. And it was excellently contrived by the all-wise God that we should be able, from those different effects, to discern betwixt things which differently make for our preservation and happiness.

6. And as men perceive a difference in their

ideas, whence they infer a difference in the objects exciting them, so the first thing they are busied about is to invent names to convey their ideas to others by. The annexing sounds to ideas, from whence, by degrees, and after various improvements upon them, results language, was, that men might communicate their sentiments, with their reflections they make on them, to each other. For as the species no otherwise subsists than by supplying the wants, and the imparting of good offices from one to another, in which view men's entrance into society commences a necessary duty, so the benevolent Author of this constitution hath, as it became him, admirably fitted us for all the purposes of a social life. He hath given us the power of framing articulate sounds, and of making those sounds the signs of our ideas, in doing which we are enabled to make known our inward conceptions to each other, and can discourse of things commodious and incommodious, both to ourselves and others, and what is proper for beings in our circumstances to do or to avoid.

7. The mind is perfectly arbitrary in choosing sounds to represent her ideas to others; there being no more connection in nature betwixt one particular idea and sound than another; and therefore what we now call green might as well have been called blue, since the resemblance betwixt that sensation and the sound green is just the same as betwixt it and the sound blue.

8. Since the design of names is to convey our thoughts and ideas to others, and because every distinct motion of the nerves is a distinct idea, if every distinct idea required a distinct name, it would be impossible for the most fertile imagination to invent names to stand for all of them; or, if this might be

done, it would still be impossible for the memory (though ever so tenacious) to retain them. Hence the necessity of joining several ideas of the same quality together, and of combining them into one; and afterwards giving it a general name. The art the mind uses, and the method she observes in forming general, abstract ideas, and in distinguishing things into sorts, is as follows.

9. Among that variety of objects which affect our senses, we perceive them to agree in some ideas which they produce, and to disagree in others, that is, the same and different ideas are alike produced from two or more particular objects, the object A, for instance, producing some of the very same simple ideas which the object B does, and some different from them. Now the mind passing over those ideas in which two or more objects differ, makes choice of those in which they agree, and combines them into one complex idea: which idea then becomes general, or it is made the representative of all others of the same sort; that is, it is contained in, and may be predicated of more than one particular thing, which general idea distinguishes that particular thing to which it is applied, and wherein it is found, from all others, and is called the essence of it. The essences of those things therefore we rank into sorts, can be nothing but the general idea, or rather the name standing for that general idea which we annex to thi gs so sorted. And this way the mind makes all her general abstract ideas, viz. by leaving out those ideas in which particular things differ, and retaining those in which there is an identity; which act of the mind is called abstraction. And from general ideas once made the mind proceeds to the making of more general ones, which is ever done by setting aside

those ideas in which particular substances differ, and by collecting and connecting those in which they agree.—In this manner we proceed from complex ideas of individuals to the forming those of a species; and from abstract ideas of a species to those of a genus; and so on to a *summum* genus; in which process we may observe that the same complex idea shall itself be the idea both of a species and genus, or, to speak with greater propriety, a less or more generic term, according as it is considered with respect to things above or below the rank it holds in the series, being a genus in regard to things *below* and a species to those *above* itself. Thus the complex idea, animal, is a genus or more generic term in respect of man, in respect of body or matter a species, or less generic term.

10. From the above account of the nature and origin of abstract, general ideas, that is, of essences, it appears, first, that they are wholly arbitrary, and of our own making; secondly, that having no experience but what the mind gives them, they can infer nothing further than a power she has of framing them, and tying them together by the name; they are the workmanship of the understanding, and creatures subsisting by its invention.

11. The mind in contemplating her ideas perceives an immediate, intuitive connection and repugnancy betwixt many of them; whence it is that the same and different properties may be ascribed to them, or they may be reciprocally affirmed and denied of one another. Thus rationality, for instance, may be affirmed of a man; whiteness of snow; and sweetness of sugar. And out of this variety of ideas may be formed a great variety of propositions; for observing perception, rationality, with a power of beginning motion, joined

to a corporeal substance of a certain figure, to make our complex idea, man, we get this proposition, or we may say of him, that he is a sensible, rational, self-motive, corporeal being; and leaving out rationality, we come by the more general abstract idea, animal.

12. This agreement and disagreement of ideas is, we see, relative to the order of nature, and dependent on the will of the Deity, in having made us with faculties for receiving them in the present manner, and who might have so formed and modelled us at first, if he pleased, that the same particles of matter which now produce the sensation we style sweetness, might have excited the opposite one in us. When things are once constituted in some particular manner, they will necessarily be the occasions of certain ideas, effects, &c. to sensible beings. But still this necessity is subsequent to, and flows from, the will of the Author of nature, who might have produced things in any other manner. Would but men attend to that course the mind takes in the drawing out and making propositions, they would be not so forward in ascribing either eternity or independency to them: for they are all of the mind's own forming, and ultimately resolvible into that power by which she perceives an idea that is there to be that very idea which it is; and that two distinct ideas in the mind are not one and the same. That two and two being equal to four is a necessary truth, means no more than that the term two being appointed by common consent to stand for, or represent the objects A and B, or the ideas produced by them, are equal to, that is, the very same with A and B, or, in other words, that every thing is what it is, and cannot differ from itself. Conformably to this, the abstract idea

which we annex to the word virtue, being essentially different from what we call vice, we say, God cannot make virtue vice, or vice virtue; that is, he cannot make two ideas the same whilst they are supposed to be different.

13 The mistakes men run into on those occasions seem to arise from hence: that finding certain ideas to agree in their minds, and all other men also agreed about them, they form certain propositions out of them; abstract those from particular instances, after that from the present frame of things, and then set them up in their minds as independent truths or standards, to which other truths are to be referred, and by them tried; call them eternal, necessary and immutable; though all of their own making, as by the reflex act of the mind they can make millions which never existed before, nothing more being required for the doing of it but a perception of the agreement and disagreement of the ideas which compose the terms, and the joining or separating those by signs, that is, the affirming or denying one of another, as they happen to agree or disagree in our minds! truth being no other than the expressing by outward signs, the connection and repugnancy which our ideas have with each other. The same method, though we little think it, is observed in abstracting continuance, extension, &c. and thereby raise a thousand phantoms we can never lay again, and delude ourselves by our own abstraction.

14. With what propriety then can those truths which are all of the mind's own making, and have no existence out of it, be stiled any determiners of the Deity? Shall the great Creator be bound by plans of his creature's raising? And obliged to suit his acts to their hypotheses about him? Besides, if

ideas which are posterior to the present constitution of things, and arising from it, be neither eternal nor necessary, how should propositions formed out of them be either one or the other! When the Deity out of an infinite number of systems, equally effective of his purpose, hath made choice of some particular one, he ever directs his acts in subserviency to it, and to the extending and improving those effects which necessarily result from such an establishment; and not only this, but requires that his creatures do the same. And in his various dispensations to them, as in their several intercourses with each other, he wills that things, their habitudes, and modes of existence be expressed (when it is required they should be expressed by some outward, significant act) according to what they are, the uses they are intended for, and the effects they have upon us; because this is no other than a continuation of his design in creating at first. But can any one say, that those effects, &c. lay a bias upon his will, and necessarily determine him to choose that system preferably to any other? that they have a full, obligatory power, antecedent to all appointment human and divine? For who sees not, that they are subsequent to, and connected with, the present constitution of nature? And is not this constitution dependent on the will of the author of it? In what sense therefore can they be said to be obligatory upon it? That he will constantly act in agreement with, and furtherance of those effects, &c. means no more than having once fixed his choice he will ever persevere and abide by it. This indeed is a consequential, but no antecedent necessity of acting thus or thus; a necessity of acting in a certain particular manner, when things are

constituted in reference to a pre-ordained model; not a necessity of forming them by such model at first.

15. Were all our ideas either entirely the same, or wholly diverse, they would admit of no comparison among themselves; for things essentially the one or the other have nothing *in se* by which they can be compared: all comparisons necessarily including more or less. On making choice of two or more ideas, and setting them aside of each other, and viewing them together, results a relative idea, provided the ideas compared have something in common, that is, any modes of the same simple idea. Thus every particular substance which possesses any one quality, mode, or circumstance of existence in common with any other substance, may in that respect be compared together. A line of a certain length may be compared with another line, of any assignable length; a surface with a surface; and a solid body to every other of the same dimensions. From which account of the origin of relative ideas it plainly appears, first, that they must be later than any other class of ideas, as they arise from the comparison of two or more ideas with one another, which in order of conception must be prior to them, as the cause to its effect. Secondly, that they are no real qualities existing in external natures, nor do they, like simple ideas, presuppose the presence of objects *ab extra*, as necessary to their production. Thirdly, that they derive their existence from the perception the mind has of two or more objects, and of their agreement in some respects, and disagreement in others, when compared together; and doing so, they owe all the being they have to that perceptive faculty of the mind. Fourthly, that they are consequent

to the existence of things, and dependent on its present modality; for supposing things *without us* should exist in another manner, or ourselves to be differently made, we should have other perceptions of them; from whence would arise different relations. And if they are subsequent to the existence of things, and dependent on our manner of perceiving them, they can neither be eternal nor immutable.

16. In describing the method the mind takes in forming propositions, and how she comes by her present fund of relative ideas, one sees what little reason there is for ascribing so great things, such a wonder-working power, as some have done, to certain relations, fitnesses, &c. in making them, for instance, independent on the Divine will, and a law to it, that they are of so binding a nature, as supposing the first cause once to act, he never could but have been, and ever will be, tied down by them. Whereas it appears by the account above, that all relations are founded on comparison, that is, on an act of the mind taking a view of her ideas, and comparing their agreements and disagreements together, and consequently can have no existence out of it.

17. Relations of external objects are generally ranked under the three following classes. First, the relations of inanimate things to one another, in respect of their quantity, site, figure, motion, &c. Secondly, the relation of inanimate things to sensible beings, as means of happiness and misery to them. Thirdly, the relation of rational beings amongst themselves, founded on particular acts done by one to another.

18. The first sort of relations cannot determine the Deity at all. With such a Being there is no

difference betwixt this particular site, magnitude, figure and mode of existence than that; since his happiness has nothing to do with one or the other; being complete in itself, and incapable both of enlargement and diminution.

19. The relation of external objects to sensible beings can be no motive for him to produce the last with such natures, nor the first with that particular tendency to the happiness or misery of those beings, unless he be previously supposed of a benevolent or a malicious disposition.

20. Nor can the last division ever incline him to frame a system of beings with such a reciprocal dependency, and to depute them those powers, duties, &c. as in consequence of certain actions done or continued, they shall be related to one another in the manner of superior or inferior, husband and wife, parents and children, prince and subject, unless we suppose him acting with a view to some certain end which requires such subsisting relations betwixt the creatures he has formed.

21. It is quite absurd to suppose the Deity, who is all perfection in each of his attributes, determined in his actions by any principle *extrinsic* to his own nature: equally absurd is it also, to attempt to draw out for man's use a scheme of natural religion, or to deduce moral obligation from certain independent fitnesses, relations, truths, &c. or indeed from any other principle but the divine will, which in all systems of morality must ever be taken in in order to make the duties thereof binding upon mankind; and without supposing which, neither the authors of those systems can (I am sure) be consistent with themselves, nor with the subject they are treating of.

22. The cast lies here; from the connection

of the parts of this system we frame notions of certain relations, which we abstract from the present order of things, and make antecedent, and superior to the Divine will itself. We then frame others of the same kind, supposed to be in other systems, and endue them all with the same imaginary eternity; though all those arise wholly from what we find in fact, without which we should have none, nor would it have been in our power to have formed any. Here we begin well, but go a great deal too far, and, as I before observed, delude ourselves by our abstraction. We sometimes come into the same scheme by not going far enough, viz. we stop at any prejudice, habit, association, &c. in favour of virtue in general, or of some particular species of it; and having forgot how such association was first made, or habit acquired, or what use the thing admired is really of; we call it absolutely fit, good in itself, &c. taking it for granted that we have either intuitive knowledge, or an implanted sense of its excellency, both which, did we trace all our associations to their infancy, would be found false in fact. In this sense also the understanding does often make its own objects: we create a thousand truths every day, which have as good a title to eternity as any others.

Since writing the above, the History of the Works of the Learned, for August 1743, fell by accident into my hands, a writer in which seems more than ordinarily zealous in defence of the independent scheme, that deduces all law and obligation from certain abstract relations, supposed independent on and superior to the Divine will itself. The most material arguments in favour of the said scheme have, I presume, been already invalidated; and the strongest objections against the author of

the Notes to the Translation of archbishop King's Essay on the Origin of Evil (against whom this writer, though with much candour and a merciful disposition, has planted the chief of his metaphysical artillery) have been sufficiently removed before. I shall only therefore take notice of one or two remarks, which he introduces with that air of complacency as can only arise from his conviction of the truth and validity, as of the justness and propriety of what he offers. In speaking of reverence as a duty, he observes, "that if there was no "fitness or unsuitableness in the thing itself, ante-"cedent to the will of God, or the happiness it "produces; then God might *originally* have an-"nexed the happiness of his creatures to their ir-"reverence towards him; and bound that as a duty "upon them; if this appears an absurd or impossi-"ble supposition to those who deny any antecedent "fitness or unfitness in things, it is a plain giving "up their cause; for what absurdity can there be "in that supposition, if the suitableness of rever-"ence from a creature to the Creator depends "solely on the Creator's will, and the happiness he "has made consequent upon it? Since his willing "the direct contrary would make irreverence as "suitable to the nature of both." What is it we usually mean by a creature's reverencing its Creator? Is it not the having awful thoughts and apprehensions of him in our minds? But whence does this awe and dread of him arise? Not from the ideas of creature and Creator considered merely as such, that is, we are not so affected if we look no further, but confine our thoughts to the act of creation only. Is it not more probable that it arises from the sense of the power and majesty of that Infinite Being, who not only first brought us into

existence, but whenever he pleases can turn us out of it again, or make that existence miserable to us? the consciousness of which cannot fail of making us fearful of doing whatever we judge may be disagreeable and offensive to him.

This gentleman maintains that if reverence be a duty because God wills it, then might we have willed irreverence to be such, or bound it as a duty on his creatures. To which I answer,

The Deity in all his actions must ever be supposed to have some end in view. But since such attributes as independence, eternity, infinite intelligence, power, &c. do not necessarily imply their being exerted in the production of things *without*, no reason *a priori* can be offered why he should ever act at all, or in one manner rather than another. Suppose him of a benevolent disposition, and his communications in such case will be being and happiness: but why an independent Being should be benevolent rather than otherwise, no one can tell. We cannot therefore come to a knowledge of the Creator's will otherwise than by consulting his works, which upon the first survey of them, and of their various habitudes and reciprocal dependences, shew forth the benignity of their Author in an uncommon degree. Since then the imparting of happiness is the sole exciting principle of action in the Deity, and because this happiness is capable of being communicated different ways, or as more systems than one may be equally subservient to the Creator's views, it is certain, that if will doth not, nothing else can, determine what particular system shall exist. In this sense therefore, every system of beings that can be supposed to exist, and the relations subsisting betwixt the parts of it, are both one and the other certainly de-

pendent on the divine will. And to talk of relations as prior to, and independent on, such will is a monstrous absurdity. But when a certain system is once resolved upon, to suppose it might have different relations, effects, &c. or the subjects of it be under other and contrary obligations than what do necessarily arise out of its establishment, is to suppose the Author of it unwilling what he had before willed, or that he shall reverse his first determination. Irreverence therefore could never become a duty, even on our principle of deducing all duties from a consideration of the divine will as the only proper foundation on which they rest, and into which all their binding force is ultimately resolvible.—Reverence is enjoined by the Creator, because such an affecting sense of the Supreme Being, with whom lies the distribution of all our happiness and misery, is essentially necessary to secure the strict observance of such duties, on the careful, regular discharge of which depends both the being and happiness of his creatures. And whatever are means to this end, the same become proper duties of rational dependent beings; reverence is a duty, because God wills it; God wills it, because it promotes his designs of creation. Irreverence has the contrary tendency; therefore is forbidden.

A little further on, this gentleman asks whether "reverence and gratitude to the Creator "would not be always the duty of a creature, "though they should suppose him unalterably "placed in a state of the utmost happiness he "was capable of?" In respect of this question I have the following observation to make. First, to suppose a creature unalterably placed in the same state, is to suppose that creature in a state of inde-

pendence on its Creator, and, as such, is a self-destructive notion; for it is in effect to suppose it created and not created at the same time. Secondly, it is of the nature and condition of a rational, dependent being to be ever improving and advancing itself to greater degrees of perfection, by the exercise of those powers belonging to it. But will not its own continuance in being, and the continuance of those its faculties and powers of action, be constantly at the disposal of him on whom he is dependent for them? This is self-evident. It is absurd and contradictory therefore to suppose a creature advanced to such a height as to be incapable of rising higher, or to be happy to that degree as not to have it ever in his power to become more so. Thirdly, which is the most material observation, but what is generally overlooked or not attended to, the question is put and the appeal made to beings known to be under the influence of this association, who, being so, are prejudiced, and, in that view, incompetent judges to be applied to in determining an affair of this nature. For in a system of beings constituted dependent on each other, and absolutely *so* on the great Author of it, gratitude is a proper duty of those beings. And therefore whenever such a system once exists, that particular disposition will necessarily be formed, or it will grow out of the circumstances of such beings. The supposition therefore is such as destroys itself. "The very notion of reward and punishment," says this writer, "implies an antecedent duty or "obligation, the conforming or not conforming to "which is the only ground of reward and punish-"ment: those therefore cannot be the foundation

" of the obligation; though the translator supposes " all obligation to arise solely from a prospect of " them." Whenever this gentleman desires it, I am ready to demonstrate, and, I hope, to his satisfaction, that all obligation is founded on a view of obtaining pleasure or of avoiding pain. And that to talk of obligation without a motive, or of a motive distinct from happiness, is quite ridiculous. At present I shall only take notice what it is in actions which intitles a person to divine favour; and that is, in short, the intention of the agent; and therefore if in any performance we look not up to God, and have his acceptance as one of the main ends of our acting in view, however agreeable, as to the material part of it, such act may be to him, still we have done nothing that can in reason recommend us to his approbation, and give us a right to a reward from him. Since nothing can in reason recommend us to the one, and entitle us to the other, but what was done out of sincere obedience to his declarations, and with a full design or intent to please him. The ingenious author of the notes above mentioned has an observation much to our present purpose. " If we follow virtue," says he, " for its own sake, its native beauty and intrinsic " goodness, we lose the true idea of it, we mistake " the means for the end; and though we may in- " deed qualify ourselves for an extraordinary re- " ward from God for such a state of mind, yet we " really do nothing to entitle ourselves to it; if we " attain the good effects of every virtue in this " life we have our reward; if we do not, what " claim have we to any rewards from God, whom " we have never thought on in it, and consequently " whose servants we cannot be said to be? the only

" principle which can in reason recommend us to
" His favour, must be the doing all things to his
" glory, in obedience to his will, or in order to
" please him."

SECTION

SECTION VII.

SEVERAL causes concur to the forming this benevolent temper, such are, first, greater susceptivity of the person in respect of external objects, with proportionably intense reflections upon them; secondly, associations in favour of certain moral acts or particular virtues, which shall gradually, though insensibly, prepare the way for it, with a repetition of those acts arising from such associations; thirdly, attention to the Deity, who requires it as a duty of us to act in such manner as shall necessarily end in acquiring this habit or constitution of mind. Those, like so many acting means, conspire to the producing this temper or disposition.

2. The causes exciting love in an observer towards free rational agents, are, similitude of manners, and dispositions of mind analogous to the leading qualities in the observer; agreeably to the old observation, Like ever loves to associate with like. Thus, for instance, a kind communicative temper is always favourably disposed and tenderly affected towards all benevolent characters wherever existing, and will have opposite sentiments and opposite affections for opposite natures and propen-

sities of will: and this in proportion to the moving, determining principle of acting in each.

3. The quantity of affection to any moral agent will be constantly as the causes of love in him drawn into the observer's benevolence, or, substituting the initial letters, $A=C\times B$ suppose the affection to the object given, the product of the causes of love in him by the benevolence of the observer will ever be equal to it: and the affection to the object, with the causes of love given the benevolence of the observer, will be the affection divided by the causes of love, or $B=\frac{A}{C}$; and the affection and benevolence known, the causes of love will be the affection divided by the benevolence, or $C=\frac{A}{B}$. When the causes of love in two objects are equal, the affection to each will be as the quantity of benevolence in the observers, or $A=B+\mid$, when the benevolence is equal, the affection will be as the causes of love, or $A=C+\mid$.

4. When the benevolence of two tempers hath the same proportion, each to the other, as the causes of love in the objects affecting them have, that is, when the benevolence of one temper as much exceeds the benevolence of the other as the causes of love in the object answering this latter temper surpass the causes of love answering to and affecting the former, the quantity of affection to both objects will be alike.

5. When the causes of love and our attachments to the objects are equal, our desires and pursuits after their happiness will be as the strength of our benevolence.

6 Different objects contain different powers of producing pleasure and pain in sensitive natures.

Consequently actions in pursuits of those different objects have different tendencies to human happiness and misery. The following general rules of acting, and the propositions expressing the various moments of good produced by them, universally obtain in this our system.

7. In private pursuits, the moment of good is in a compound ratio of the degrees of self love and the abilities of the agent, or $M=S\times A$; consequently, the product of the degrees of self-love by the abilities of the agent expresses the moment. The moment divided by self-love gives the abilities, that is, $A=M$; and the moment divided by the abilities shews the self-love, or $S=\frac{M}{A}$. This will ever hold of all actions undertaken on a private account.

8. When the degrees of self-love in two or more agents are the same, the moments will be as their abilities, or $M=A$. When the abilities are equal, the moments will be as the strength of self-love, or $M=S$.

9. When the two principles of self-love and benevolence, the one innate, the other acquired, concur in the same pursuit, the moment of good will be as the sum of the degrees of self-love and benevolence drawn into the abilities of the agent, or $M=S+B\times A$. The separate shares of each in this production may be thus ascertained: the moment, as we see, is the product of the multiplication of the sums of self-love and benevolence by the abilities, or $M=SA+BA$; the selfish principle is the moment divided by the abilities when benevolence is substracted from it, or $S=\frac{M}{A}-B$; the benevolence is the moment divided by the abi-

lities when self-love is taken away, or $B=\frac{M-S}{A}$; and the moment divided by self-love and benevolence gives the abilities, or $A=\frac{M}{S+B}$

10. When the two principles do not conspire, but draw different and contrary ways, the moment will be the excess of the stronger above the weaker principle, or $M=SA—BA$, supposing self-love the strongest; but taking benevolence for the highest principle, it will be $M=BA—SA$.

11. When the benevolence of two agents are equal, the moments of good by each to the public will be as their abilities.

12. When their abilities are equal, the moments will be as the strength of benevolence or public love in each. Whence it follows,

13. That supposing the benevolence of two agents to have the same proportion to each other as their abilities, or when the benevolence of one as much surpasses the benevolence of the other as the abilities of this latter exceed those of the former, their moments to the public will be the same and equal.

14. In their pursuits after objects men's elections ought to be determined in the following manner. When the degrees of good in different objects are the same, our choice should be made in favour of such as are the most likely to be obtained; when the probability of possessing two or more of them is equal, those ought to be chosen which contain the greatest aggregate of good in the enjoyment.

15. The moral importance of actions, or their moments to the public, will be in a compound ratio of the number of enjoyers and of what each enjoys from them, or $I=N\times Q$; consequently when

the numbers are alike, the importance will be as the quantity of happiness to each, and in equal quantities, the importance will be as the numbers.

16. It is to be considered, that our actions are not barely confined to the person for whom they were principally designed, but they generally reach further, and have a wider and more comprehensive influence. One man may possibly be placed in those circumstances that by a single act of mine he shall be enabled to do the public the same advantage, as it could have received from ten others, who might likewise have been benefited by it; in which sense, it is certain such particular act of mine is of the same beneficial tendency and import as if it had been directed to ten; and this shews, that men's situation in life may occasion great alteration in men's elections, and be a balance to numbers. —It teaches us also, how careful we ought to be in searching after, and attending to the consequences of any action, before we resolve and fix upon it, so far as they are capable of being foreseen and traced out, which many times all of them are not, as mixing themselves with others, and so, both affecting them, and being in return affected by them. No one can certainly tell how far one individual act of his shall extend, or what consequences may be teeming in the womb of time, or how long it may be before they are all brought forth; while which be done the effects of such act cannot be said to be entirely over.

17. All pleasure is relative to the faculty perceiving it, and is in a compound ratio of its intenseness and duration. Hence, in equal degrees of intenseness, the pleasure is as the duration; and in equal durations, the pleasure is as the intenseness. Consequently, when the intenseness of one pleasure

is to the intenseness of another, as the duration of *this* is to the duration *that*, the pleasures, strictly speaking, are equal, and it is perfectly indifferent whether of them be chosen, provided man's existence is commensurate to each, and the enjoyment of neither of them incompatible with the enjoyment of others. Whence we see, that an infinitely small pleasure may be preferable to an infinitely great one, provided the duration of the former surpasses the duration of the latter in a greater ratio than the intenseness of one exceeds the intenseness of the other. This shews us it may be many times prudent to postpone a very great pleasure to a very small one, supposing their durations bear little or no proportion to each others.

18. The intenseness of pleasure depends on the quantity of good in the object, and the degrees of susceptibility in the person affected. When the susceptivities therefore of two persons are the same, the intenseness is as the quantities of good in the object; and in equal quantities, the intenseness is as their susceptibility.

19. The duration of pleasure depends on the constancy of the object acting, and of the subject acted upon. A change in either of those necessarily occasions a change in the duration of our pleasures.

20. A creature is ultimately happy, the sum of whose happiness surpasses the sum of its misery, and to such an one existence must be deemed a blessing.

21. A creature is perfectly happy when its happiness is adequate to its capacities of enjoyment, and commensurate with its existence; and a creature in this situation will be allowed to have ob-

tained the end of its being; on condition such capacities are every way suitable to the opportunities it had both of making and enlarging them.

FINIS.

[V.]

Man in quest of Himself:

OR A

DEFENCE

OF THE

INDIVIDUALITY

OF THE

HUMAN MIND, OR SELF.

OCCASIONED BY

SOME REMAKS IN THE MONTHLY REVIEW
FOR JULY 1763,

ON A NOTE IN SEARCH'S FREEWILL.

By CUTHBERT COMMENT, Gent.

Brian Tucker

They imagine Compounds to be somewhat really different from that of which they are compounded; which is a very great mistake.
Clarke, Attrib. 6th Edit. 1725, *page* 53.

Endlessly separable parts are as really distinct Beings, notwithstanding their contiguity, as if they had been at never so great a distance from one another.
Ibid. p. 89.

LONDON:
PRINTED FOR R. AND J. DODSLEY, IN PALL-MALL.
1763.
[*Price One Shilling.*]

MAN IN QUEST OF HIMSELF.

IT is an old observation, that nothing is more difficult for a Man to know than himself; insomuch that this science was thought unattainable without supernatural assistance; for

From Heaven's high dome descended, KNOW THYSELF.

But then this was understood to respect the knowledge of a man's character, sentiments, and real motives of action; nor was it ever esteemed difficult to know his own person from that of another, or from his cloaths, his hair or any thing else belonging to him. Whereas a difficulty has been lately started in ascertaining what is properly *the Man*, or to what the pronoun *I* ought to be applied.

The last Monthly Review for July 1763, has made honourable mention of my Cousin and myself, and has interspersed therein some criticisms, by way of admonition for our conduct: He may see they are not lost upon us; for we have profited by them already in our title-page. We had pro-

ceeded before upon Horace's antiquated rule, being studious rather of producing fire out of smoke, than smoke out of a flash; never reflecting, that since the invention of gunpowder it is manifest the gun can never do execution if the pan do not flash. So to please him, I have put a little more powder into the pan this time of charging: and we hope he perceives by the look of the flash, that our shot is not levelled against him, but against an opinion he has advanced. For these two are very different marks: people may differ in sentiment upon a speculative point, and still be very good friends. And indeed he has said so many obliging things of us, far beyond our most sanguine expectation, that it would be the height of imprudence to put him out of humour with us, or attempt to lessen his character: we rather wish his authority may be so great with the public, as that they may give their voices upon us according to his summing up the evidence; we shall be perfectly satisfied with the verdict.

Yet we shall observe in passing, that besides his admonitions, he has been careful to instruct us by his example too; for, though he has allowed my Author to have acquitted himself with politeness, yet it seems this was not a politeness of the right fashionable colour, admired in our great Metropolis and the adjacent Borough; therefore he has set us a pattern of the true genuine sort in the following expressions: *Greatly deficient in physiological knowledge;—Very considerable blunders;—These very accurate philologists;—Indeed, friend, you have here overlooked yourself;—It is with equal impropriety they talk.*—Now, we must needs acknowledge these strains in the highest pitch of modern perfection, because the like abound in the North Briton and Cave of Famine, those celebrated

performances, which every true-born Englishman doats upon. But we are much afraid whether we shall be able to copy after his example; for it is commonly observed, that nobody ever succeeds in a thing he does not give his mind to; but it happens unluckily that we find in ourselves no inclination to attain this modern genteelness: our ambition prompts us rather to the *Ridiculum* than the *Acre*, and we should be proud if we could acquire a spark of that old-fashioned politeness described by Persius in one of his predecessors:

> When Horace every foible touch'd with art,
> His smiling friend received him to his heart,
> Pleas'd with the tickling probe, nor felt it smart.
> The testy people too could patient stand,
> While wip'd their follies by his skilful hand.

I do not know why he should take such distase at my button, unless perhaps that he saw his own face in one part of it; and might be a little chagrined to find, that I had not better maintained the dignity of the noble branch of the *Comments*.

However, I have the pleasure to see this little disappointment has not overcome his affection to a relation; for he has spoken of me in a very handsome manner, well becoming one *Comment* of another: and with respect to my Author, whom he will easily believe I must love as well as I do myself, he has proceeded with remarkable tenderness. For it being absolutely necessary to find fault somewhere, because the Public, proceeding for once upon a very right principle, That there can be no person nor performance in this world compleatly perfect, would not think him well qualified for his office of Critic-General, if he did not find something

to blame in every piece he took in hand; he has kindly spared the main work, and fallen upon one of my Notes, containing a matter no ways affecting the argument carried on in the text.

But notwithstanding his good intention, so it happens, that he has done us more mischief than we flatter ourselves he designed. For the Individuality of the Mind was a principle Mr. Search had depended upon to prove its unperishableness; which gave an opening to his enquiries concerning the other world. Because his plan having confined him to build solely upon the fund of natural reason, he was not entitled to avail himself of the assurances given in the Gospel: but while it remained uncertain whether our continuance was to last any longer than this life, there was very little encouragement to consider whether there were another world or no: on the other hand, if it could be shown from contemplation of our Nature, that the Mind is built to last for ever, then it would become expedient to examine what is likely to befall her hereafter, and whether any thing to be done at present may affect her future condition.

Therefore my cousin exhorted me to endeavour settling what is a Man's Self, and whether it may have continuance after dissolution of the human frame: not in contradiction to Mr. Monthly, with whom we have no quarrel, but in defence of an article we conceive material, against whoever shall attack it, or as a further explanation to such as may not have fully comprehended our meaning.

But we must crave leave to make our defence in our own way; and as Horace observes that every animal places his dependence upon the arms Nature has furnished him with, the Wolf never defends himself with his heels, nor the Bull with his

teeth: so we, who it seems are excellent Philologists, though greatly deficient in physiological knowledge, and for this reason do not clearly comprehend what is to be understood by physical and metaphysical existence, palpable and impalpable individuals, material and immaterial substance, as handled by our opponent, may be allowed to avail ourselves of that part where our greatest strength lies.

Therefore, under the guidance of our Patroness, who has helped us so well hitherto, we shall observe that *Same* is an equivocal term. If, upon giving me a glass of wine, I should think it tasted different from that you gave me half an hour before, and you assure me it is the same wine, because you poured it out of the very same bottle, I should rest satisfied with the answer. But if a conjurer should pretend to take out a glass of wine unmingled that I had thrown into water, and upon his producing a glass of pure wine I doubted whether it were the same, if he should tell me, Yes, for he poured it out of the same bottle, I should think he trifled with me.

In like manner it may be said, that rich and poor are all the same flesh and blood, or that every stick of elder contains the same pithy substance. Yet whoever says this does not imagine, that my cookmaid and I have but one body, or the same mass of blood between us: nor that one stick of elder contains the same substance as twenty.

From hence we may see there are two sorts of identity; one wherein things are the same, in appearance and quality, and this we may call specific: nevertheless they still remain numerically distinct; as this egg is not the same with that, how much

soever it may be the same to the eye, or for any uses we may have of it.

Thus substances, as numerically distinguished, never fluctuate nor change into one another; their fluctuation is only of form or position upon their entering into compositions of substances specifically different. The same particles which were mould last year, might afterwards have become grass, then mutton, then human flesh, lastly, a flea or a maggot, and continue the same throughout all their several migrations: so that what is a maggot now, may have been part of a man, or a sheep, or a blade of grass, or a clod of dirt.

Therefore if we consider man as the whole composition of flesh, blood, bones, and humours, it is plain he fluctuates and changes continually: for if he be kept without victuals, his substance wastes away, and is renewed again by proper nourishment: so that how long soever he may continue the same species of creature, he does not continue the same substance in all its parts a week nor a day. Nor was the Mr. Monthly who dealt so favourably with us in July, the same with him that treated a friend of ours with the like benignity in 1755.

I have met with some who say they have no idea of substance, because they cannot conceive one devoid of all quality whatever; but this is not the right way of going to work for conceiving it. For there are some things we cannot apprehend existing by themselves, though we may easily in conjunction with others: a father cannot be without a child; there cannot be colour without figure, nor figure without magnitude; yet the ideas of father and son, of colour, figure and magnitude, are clearly distinct. Nor, if we consider the matter fairly, is it more easy to apprehend quality by itself

than substance. For can there be squareness without something square, or redness without any thing red? Or can there be a square or a red nothing, any more than a substance without quality? But squareness and redness are only perceptions of the mind? What then? Should we suppose with Berkeley, they are not effects of the external causes we ascribe them to, then are there no qualities without us any more than there are substances: but if there be real qualities producing the perceptions, then is there a real something possessing the qualities. It is true we may be sometimes deceived by appearances of things that are not real, as when a man sees apparitions: but though there be no substance standing before him in the place where he apprehends it to be, yet there is a real substance somewhere, either in the eye, or the humours, or the brain, causing the appearance. Even in the most retired thoughts of the mind, whether we imagine her to raise those thoughts by her own immediate operation, then is she a substance possessing the quality of impressing them; or whether she uses some organ of our internal material frame, as an instrument to impress them by, then is the modification of that organ the object we discern.

But the strongest idea of substance we may have from ourselves, the knowledge whereof is more certain than that of qualities. For how know we the qualities are real, unless because we really perceive them? And if we are nothing real ourselves, they cannot be really perceived by us: for it is the hardest thing of all to conceive how any thing unreal can really do or be really affected by any thing. And this substance retains its existence when exerting no quality, as in sound sleep.

Qualities continually change: a square piece

of clay may be moulded into a round, warm water may grow cold: but in all these changes something still remains the same, and that can be none other than the substance. When a quality goes off, it is succeeded by another, as squareness in the clay by some other figure, and warmth in the water by coolness; nor does the substance ever want a quality to invest it: but the quality upon being altered does not fly off to some other substance, but is absolutely lost; and may be regained without being drawn from any other fund.

We come next to the term *Individual*; and what does that import but something that cannot be divided? Therefore to talk of every Individual being a compound, is a palpable absurdity, a flat contradiction, the same as an indivisible divisible, or an uncompounded compound.—Perhaps here our Master will think us hopeful lads, beginning to come forward in the modern politeness: but we cannot arrogate so much merit yet; for we do not charge it upon him as a blunder or impropriety; and for this very good reason; because we could not do so without hitting ourselves a slap on the face. There were three young fellows once went to see a fine garden: one of them spying another pluck a peach, whispered the third, Pray is it right to take a Gentleman's fruit without leave? Yes, says he, it must certainly be right; because I have a couple in my pocket. So contradictions must sometimes be proper, because Mr. Search uses one in page 12, where he says, "a man may have "power when he has it not." But then we see how he brings himself off by adding, "That is, he "may have it in one sense while he wants it in an- "other." Now if we take the same method for solving the other contradiction, perhaps we shall

find it throw some light upon the argument in hand.

Naturalists (I beg pardon, I mean Physiologists) distribute the productions of Nature into kinds, as animals, vegetables, fossils; which they subdivide into Species, as men, horses, sheep, &c. Several further divisions are occasionally made under these, as French, English, men grown, children, and the like. But you cannot go lower than the single bodies of each class, whose parts are joined together, not to be separated without losing their specific denomination, nor do we ever see them reunited after separation. Therefore we call them *Individuals*, because to us they appear such, and may be esteemed such for any uses we have of them.

Yet this manner of distribution admits of several exceptions: in some species there are no individuals, such as Fire, Water, Oil; because in all divisions of them discernible by our senses, they still retain their specific qualities. Some individuals may be multiplied into many; an osier may be cut into twenty twigs, each whereof is a distinct plant of the same kind. Animals and vegetables receive their substance from parents of their kind, which substance nevertheless loses its species during the passage, and resumes it again afterwards: an egg is never numbered in species with the bird that laid it; but when hatched into a chicken, it ranks as one among the poultry. Both species and individuals are often made by art: Punch, Beer, and Mead are different kinds of liquor; and when a man takes an inventory of his houshold goods, he can distinguish those of the same sort only by individuals; or if he draws off a pipe of wine, he must drive in a cork to preserve each individual bottle from growing vapid. Thus we see that both in

physiological and artificial estimation, *Individual* is an arbitrary term, applied to things for our convenience.

With regard to those species that have individuals, the term Existence or Being must belong to them. A Man, being I suppose a palpable Individual, will be allowed to have an Existence or Being of his own, distinct from all other men. So you will say the whole race of men has a Being and existence of its own, distinct from all other creatures. Very true: but not distinct from the men composing it; nor has it another Being to be added to the number of theirs. The same will hold good of any lesser collection of men; as a Regiment, which has not an additional Being over and above that of the men, nor exists otherwise than by their existence, which nevertheless they have independent on one another. For if Serjeant Bluff were annihilated, Corporal Trim might still continue the same Man he was; but if all the men were annihilated, what would become of the regiment?

Nevertheless it is manifest that all these individuals, as our Corrector justly and properly expresses it, are compounds, consisting of parts substantially and numerically distinct from each other: so that the palpable substance, *Man*, is a collection of many substances, as the Regiment was; and has existence no otherwise than that; to wit, by the existence of his parts. Were his hands annihilated, his feet might remain the same Beings they were before, as Trim might upon the destruction of Bluff; but were all his parts annihilated, the Man must utterly lose his Being.

Well, but his hands and feet are compounds too, made up of the elements: therefore they have no other existence than what belongs to the ele-

ments composing them. But what shall we say to these elements? for being a mere ignoramus in physiological knowledge, I protest I do not know what to make of them. I think I can feel earth, water, air and fire, if they touch me in quantities enough to affect my senses; therefore they should be palpable. But we are told at first they are impalpable existencies; and yet I am not sure of that neither; for it is said afterwards, that if they fluctuate and change into one another, they are no existencies at all, being devoid not only of palpable, but of absolute and metaphysical existence, which belongs to nothing besides God alone.

I shall not deny it possible the elements may change into one another, but then this is a fluctuation of form, or of essence, which seems all along to have been mistaken for existence, not of substance: for it is impossible to conceive any particular substance should ever change into another substance, whether similar or of different kind. An egg, by putrefaction and vegetation, may in process of time become an apple; but this egg can never become that egg, nor that apple; nor can either egg or apple ever lose their numerical existence, whatever various forms they pass through, or new essences they take. So if what now is earth once was water, still it is the same substance diversely modified: nor can this drop of water ever be turned into that drop, or that speck of dirt, by any fluctuation whatever.

But if the elements may change, it must be by a various disposition of their parts; therefore they have parts: and I suppose it is understood, though not expressed, that these parts have under parts, and so on for ever. Which *subintelligitur* is necessary to prove the non-existence of elements: for

since they be compounds, having no other existence than that of their parts, nor these than of the under parts composing them, we cannot make them a title to existence, until we come to absolute Individuals without any parts at all, which it is suggested, are no-where to be found.

Before this was urged against us, it should have been remembered what antagonists we were contending with, namely, the Stratonic and Democritic Atheists, who would not have pressed us so closely: for they admitted Atoms absolutely indivisible, whereout the souls of men, and all other productions were formed; and held, that these Atoms were floating about in infinite space, distinct and separate from each other, until by their collisions, assortments, and adhesions, they ranged themselves into the compound bodies we see. Upon this hypothesis, it is plain there was the same number of substances from all eternity there is now; and upon their clustering together, whether by chance or necessity, nothing new, unless in kind and quality, or essence, not in substance, could be produced. Therefore the souls of Men could have no distinct existence of their own, nor other than that of the Atoms composing them: and upon their dissolution, not a single Being would be lost; any more than the King would lose a subject, that is, a palpable substance upon disbanding a regiment.—Nevertheless these Atoms were a sufficient foundation for the existence of what they composed, their substance being that of the compounds whereinto they entered. So that our argument, however defective in proving our point to other people, may still remain good *ad hominem*, upon the occasion whereto we applied it.

Yet we need not want the like foundation

without availing ourselves of the Atheist's concession: for after all possible division of Matter, it will continue Matter still; nor can you reduce it to nothing by any separation of parts whatever; whence it follows, that there are particles which never were, nor ever will be smaller than they are. These then may fairly be stiled Atoms actually, if not potentially, indivisible. Nor is this repugnant to the opinion now generally received among physiologists, that all Matter is homogeneous; all compound bodies being made up of a *Materia prima*, which is every where one and the same in kind and quality, their various essences resulting from the various assortments whereinto it is cast.

If it be said the particles of *Materia prima* must have a right side and a left, separable, though perhaps never actually separated from one another; this is more than we are warranted to assert. For the most considerate persons have forborn to pronounce peremptorily upon the divisibility of matter, any further than that it is indefinite, that is, no magnitude can be assigned than which we may be assured there cannot be a smaller. But divisibility absolutely infinite, has its difficulties as well as finite: for upon that hypothesis, half an apple must contain as many parts as the whole; for the half containing infinite parts, nothing can be greater than infinite; yet the other half containing the like infinity, to say that the addition of them does not encrease the number in the whole, seems as absurd as to deny that two and two make four. Since then we have not faculties to determine this point with certainty, the evidence before us of bodies existing, and of their having no further existence beyond that of their parts, is a stronger proof that

a stop must be put to divisibility somewhere, though we cannot tell where, than our want of conception of a particle without sides is of the contrary. For neither our senses nor imagination can go beyond a certain degree of minuteness; how then do we know what we might see or apprehend, were they acute enough to discern or comprehend objects below that degree.

However this be, it can scarce be doubted that the matter, or first principle of bodies, has an existence of some sort or other, whether original or derivative, it is no matter; and that whatever higher compositions are formed thereout, exist only in the existence of that; because if the matter of any body were annihilated, the existence of that being withdrawn, the body would be no more. Just as a Regiment exists only by the existence of the men, of whatever kind it be belonging to them, and upon their annihilation could exist no more.

But it is alledged, that a Regiment has no Being. Why? Because all compounds, according to us, have no existence at all. Pray when did we ever say so? Did you never hear of the Welshman, who riding with a heavy portmanteau before him, and perceiving his horse tire, took up the portmanteau upon his own shoulders to ease the beast? never considering that while the horse carried him that bore the burthen, he carried that too: and if there had been twenty men hoisted upon one another, so long as the uppermost had the portmanteau upon his shoulders, the horse would have carried the same weight as if it had lain upon his own back. So while the component parts of bodies exist, their existence runs through the compositions whereinto they enter; and palpable Individu-

als, together with whatever Companies, Regiments, Corporations, or other Compounds can be formed of them, have as much existence as their primary principles, because they have the very same. Therefore we never denied a Regiment to have existence or Being; but only that it was a Being in the singular number, distinct from that of the men, and to be added to them.

We conceived it to be like a noun of number, as a Gross, a Score, a Dozen, which, though *entia rationis* in themselves, yet have a real existence when applied to particular substances. For a dozen of counters exist as really as a single one; if you put the dozen into your pocket, you put in real substance, not a shadow or mere imagination; yet you have not thirteen things there, to wit, twelve counters and the dozen over and above.

You say, if a Regiment is no Being, neither is man a Being; and this you charge upon us as an egregious oversight. But upon what principles does the consequence follow? Why, upon those of the Atheists we were combating; and was so far from being an oversight, that the main stress of our argument lay in driving our Antagonists to the absurd conclusion of making man to have no Being, no distinct existence peculiar to himself; nor any thing more than a regiment of atoms, admirably well marshalled and disciplined indeed, but substantially and numerically the same they were before enlisting. Upon our own principles the conclusion runs the other way: for we argue, that Man must be an Individual, not like your palpable Individuals, consisting of parts, because he has a being of his own. And for the truth of our *postulatum*, we appeal to every man, Whether he can doubt of

his own existence, or that he has a personality distinct from that of all other Beings.

Nevertheless this appeal, it seems, cannot avail us; because, how could any man acquire this sense or knowledge of his personality without a human body? or in other words, how can a man exist without a body? Had we said the mind or soul of man might so exist, it would have been less exceptionable; and yet exceptionable it would have been; for how could the mind acquire a sense of personality without a body? Now if it be remembered what was the opinion we set out to battle against in the beginning of my note, namely, that the souls of men, as well as all other productions, were formed out of atoms, the correction of Man into Mind might have been spared. For when afterwards we spoke of the atoms running together to compose a human body, we thought that, upon the principles of our adversaries, Mind and Body must be the same thing: but if any one thinks otherwise, he is welcome to *dele* Body, and read Mind, Soul or Spirit; our argument will run never the worse.

As to the question, whether a Man or a Mind can acquire a sense of personality without a human body; we apprehend it as difficult for any body to answer in the negative, as for us in the affirmative. It may be said indeed, as is said of Mr. Locke, that the negative may be very easily proved on our own principles: certainly nothing is more easy than to assert this, and it may pass with such readers as will take positiveness for demonstration: but it may not be quite so easy to make out the assertion.

But supposing it certain, there can be no knowledge of personality without a body, how does it follow that no personality or existence can be had without one? or that not having knowledge of ex-

istence, and not existing, are synonimous expressions? This is new doctrine to us, and the logic by which it is proved, rises far above our pitch. It puts us in mind of that used in our infancy under the dictates of pure nature, unperverted by education, when the child hides its face in Mamma's apron, and then cries, Nobody sees me. Which, in the learned language of our Censor would run thus, "In this situation I can acquire no sense or know-"ledge of any body's seeing me; therefore, or in "other words, nobody does see me." Now in our humble apprehension, the reality of a fact is not the same thing with the evidence of it: the one may be true, though the other be wanting. If we have evidence of a thing's existing, we may believe it had an existence before we knew it, and may still continue to exist after our evidence is withdrawn and lost out of our memory.

I doubt not Mr. Monthly has passed many a night in sound sleep, since he did us the honour to take notice of us; for, considering how much more than justice he has done our characters in the principal parts of them, he can have had nothing to disturb his rest upon that score. Then during all these naps, I suppose he had no sense or knowledge of his own existence: but will he therefore say, that he really had no existence? or that every time he fell asleep, he ceased to be, was no Person, no Substance, no Being? but resumed all these again the moment he awoke in the morning? Therefore upon what grounds can he infer, that when he, and we, and all human palpable Individuals shall become stupified in the sleep of death, we shall utterly lose our existence, though we lose all evidence of it; and that a new set of corporeal organs (if

such organs be necessary) may not invest and awaken us to a new scene of evidence?

What shall we say of the houses, the trees, the fields we see around us? Have they a knowledge of their existence? or do they therefore not exist at all? To draw this consequence, must drive us plumb into Berkeley's scheme; that bodies subsist only in our idea, and are, or cease to be, according as our ideas fluctuate. So that when every body goes out of the room, the tables, the chairs, the pictures, they left behind, become instantly annihilated; and upon the company's return, become as instantly re-existent.

Notwithstanding all this, he will not deny that the mind, or spirit of man, may be an individual existence, to be destroyed only by the immediate exertion of Omnipotence. Yet in effect he does deny it a few lines below; for he says, that by existence, in this case, must be meant an absolute and metaphysical existence; in which sense it is more than probable, there is no other Being in the universe but God: for while every thing in nature appears to be in a constant fluctuation and change, it is rational enough to suspect, from analogy, that even the elements of things may be so too. Now this reasoning seems to imply, that the spirit of man is no more than a fifth element, like that called by Aristotle, *Entelechia*; for unless the mind be included in the elements, the argument from their fluctuation, that there is no created substance metaphysically existing, would not hold good: or that it is something analogous to the spirit of brandy or hartshorn, a drop of which being put into Tunbridge water, takes off the chill it would else cast upon weak stomachs; so a drop of the spirit of man infused into his material compo-

sition, takes off the insensibility naturally belonging to it, and renders it capable of sense and understanding. Yet it is plain, this drop may be divided into parts, which may one after another enter into the composition of the other elements; so that what is now spirit of man, may by and by become a drop of water, a puff of air, a spark of fire, or a speck of earth.

If this be so, I see no reason for calling in Omnipotence to destroy the spirit of man; for I suppose there are certain stated laws, I must not say of nature, but, of the universe, operating these fluctuations and changes of the elements. And that the changes must be gradual we may presume from analogy; for though a dead dog may become a tree by being buried under it, it must putrify first, and be reduced to something which is neither animal nor vegetable substance, before it can be drawn up by the radical fibres of the tree. So the elements, during their passage into one another, must be no elements at all, neither earth, nor water, nor air, nor fire, nor *entelechia*, and consequently be non-existent; for palpable existence they have none, and other existence, we are told, belongs not to created things.

The result of all this is, that ourselves, and whatever we see or handle, are made up of non-entities, than which nothing can be harder of digestion; and if we can pronounce any thing, we may pronounce this absolutely impossible even to Omnipotence. I have heard, indeed, that God created all things out of nothing, but I never knew it understood thereby, that he employed Nothing as a material whereout to fabricate his worlds; or that he moulded and kneaded up a certain quantity of Nothing, as a baker kneads his dough, until it be-

came Something. I know the Atheists, Lucretius in particular, charge this idea of creation upon us, and take great pains to overthrow it; but they fight all the while with a shadow; for no Theist ever entertained such a notion.

Another reprehension given us is for saying, that upon dissolution of the human body, there is not a Being lost out of Nature; which expression, *Out of Nature*, is, it seems, such an egregious impropriety, as to deserve being stigmatized with Italics. But we were unwaringly drawn thereinto by the example of other persons before us: for we have heard of there being a God in Nature—of invisible Natures, perhaps more elegantly expressed by impalpable Natures—of the Nature of virtue, justice, government, and many other things which are not objects of physiological knowledge. And if we were led to talk like children, by conversing among other children, it had been kind in our Master to have instructed us how to speak with better propriety: for he might know well enough that our meaning was only to assert, that upon certain substances joining together in a compound, there is not a new Being added to the number upon composition, nor is one lost again out of the whole number upon separation. Now how ought we to have expressed ourselves upon this occasion? In short, it seems not very material whether we add Out of Nature, or omit it. If a billet be consumed in the fire, we suppose the parts of it are dissipated, but not annihilated: a few of them only remain palpable in the ashes, but whether the rest be in nature or out of nature it is no matter, so they be existent somewhere; there will still be the same number of parts as before disunion; and the billet having no existence over and above, or distinct from the

parts, there will not be a Being lost upon its consumption. But we must correct our theory against another time, and adopt a new article of Faith, to wit, that a compound may consist of parts which had no existence in Nature before they entered into it; and the five elements themselves, for we must reckon the *Entelechia* for one, be made up of a *Materia prima*, every where uniform, and capable of being formed into any of them indifferently, though there be no such thing in Nature as a *Materia prima*.

Yet we cannot help saying, it was a little ungenerous in Mr. Monthly to attack us in flank, while we were engaged with another enemy, against whom our disposition was not improperly made: for they being as deficient in physiology as ourselves, would not have denied the existence of atoms in nature; therefore we still humbly conceive it was with propriety with respect to them we urged, that after dispersion of the atoms, there must be as many Beings in nature, as there had been during their coalition in a man. And consequently, if Man has a Being and Personality of his own, distinct from all other Beings, and which would be lost out of Nature upon his annihilation, he cannot be such a compound of atoms.

But having driven them out of the field, and being now to deal with another kind of assailant, we may be allowed to change our disposition according to the nature of the attack.—But hold: we shall be chid again; for *Attack* is not a physiological Being, and there may be great impropriety in applying the term *Nature* to it. Well, then, according to the manner of the attack. For atoms, it seems, there are none, and the principles of phy-

sical Beings have no existence in nature, until formed into compounds. Let us try then how we can manage our argument by help of physical Beings alone: and in so doing, our example of the regiment may still serve our purpose. For the men are admitted on both sides to be substances, whether palpable or metaphysical, whether individual or compound, 'tis all one; for though we love hair-splitting as well as most folks, where necessary, we see no use for it here; Substances they still are, distinct and independent on one another. If then there were six hundred of them dispersed about the country, they did not, upon being incorporated into ten Companies and one Regiment, become six hundred and eleven substances: nor will the King, upon disbanding them, lose a single Subject, or Substance, or Being, out of his dominion. For surely disbanding is not annihilating, nor can you conceive any Existence or Substance belonging to the Regiment annihilated so long as the men remain all alive.

Now, to apply this to man: if he be a compound, yet we are not obliged to go so far as to the primary principles whereof his elements are constituted, for then we shall wander out of Nature; but we may distribute his whole composition into parts still remaining palpable, as his arms, his legs, his heart, his brain; suppose twenty of them. These twenty parts, then, are so many several Beings, numerically and substantially distinct from each other in the composition; for the leg is not the arm, nor the brain the heart, even in a living man. So that he is nothing more than a Regiment, or collection of these twenty parts, having no distinct Being of his own which might be added to theirs to make the whole number twenty-one. And if they were

separated by dissection, though they would lose their vitality, they would not lose their substance, but there would still remain twenty substances, as many as could be counted in the whole composition, nor would a single Being be lost out of Nature.

Therefore if a man, while possessing his senses and understanding, has undoubted evidence of his own existence and personality distinct from all other Beings, and adds one to the number of those existent, he cannot be a compound or collection of substances, but an individual, making some one particular part of the composition whereinto he enters.

This brings us to the examination of what is properly a Man's Self, or that whereto the personal pronouns *I*, *You*, *He*, and *She*, may be applied. And here perhaps at first there may be thought to be no difficulty; for upon a man coming into the room, my eyes may inform me sufficiently of his person, and I may see plainly enough that he is not the table, the chairs, nor the wainscot surrounding him. Very well: let us try what I can discover by my eyes. Why, I see a face, a pair of hands, a coat, stockings, and shoes: are all these *You?* ——No, to be sure: You know well enough I pull off my coat and shoes when I go to bed, and put on banyan and slippers in the morning.——Well, but you don't pull off your hair and nails when you go to bed: then they are parts of *You.*—— No, no: they are only excrescencies; for they have no sense or feeling.——How so? If any body was to tear off a parcel of your hair, or one of your nails, should not you feel a grievous smart?—— Ay, the pronoun *I* should, because they are fastened to my flesh: but the hair and the nails would feel nothing. They are like a packthread wound

round my wrist, which if any one should twitch violently, he would hurt the wrist, but he would not hurt the packthread.——So, then, what has sense and feeling only is *Yourself*.——Undoubtedly: and every thing that has so is a part of *Myself*.——What think you of your teeth, your bones, your fat, the humours in your glands? for alterations may happen in them without your feeling it. ——I don't know what to say to that: for in common acceptation every thing is reputed *Myself* that remains with me after I have pulled off all my cloaths, except the excrescencies.——Ay, and the excrescencies too, sometimes: for we often describe a man's person by the colour of his hair; and should do by his nails, if they have any thing remarkable or distinguishing; nay, by his cloaths, if we think he has but one suit to wear. So you see the term *Self*, like other terms of common acceptation, is fluctuating, determined this way or that by the present occasion: for he that, upon his knife slipping while he carves a loin of mutton, is asked whether he has cut himself, may say, No, 'tis only a piece of my nail; but if he dashes the gravy upon his coat, he will be apt to fret at having greased himself. But what do you take to be truly and properly *Yourself?*—I doubt I must give up the bones, the fat, and the humours: but surely my system of nerves, and organs of sense, must be *Myself*; for the great Mr. *Monthly* pronounces, that without them I could not have knowledge of my personality, or, in other words, could not exist.—— But then it is the nerves and organs jointly that make *Yourself*. Your eyes are not *You*, nor your ears, nor your brachial or crural nerves; but the whole composition of them altogether is that whereto the pronoun *You* belongs.——So it should

seem.——Suppose an English soldier has lost a leg in Germany, may he afterwards say, I was born in England:——Why not?—Because the palpable compound *born*, to which the pronoun *I* was then applicable, is now no more, being destroyed by subtraction of the nerves in the leg.——Oh! but it is still a part of the same compound.——Remember what you said before, that it was not your eye, nor your ear, but the whole composition which was *Yourself*.—But it is rational enough to imagine from analogy, that compounds may fluctuate and change into one another, so that what was a Self with two legs may become a Self with only one.—May be so: but then it is not the same Self; for the term *Self* belonging to the whole composition, it is plain the present composition wants a part which was an ingredient helping to complete the former.—You puzzle me now. I wish Mr. *Monthly* were here: I warrant he would manage you with a wet finger. And yet I cannot help thinking the man was the same Self after losing his leg as before, and might apply the pronoun *I* to whatever was done or suffered by the two-legged Self.——Take care. For if the Self remains entire after loss of the leg, then it will follow that the leg, while in vital union with the body, was no constituent part of the palpable substance *I*; because this suffers no diminution by the amputation. But we will not press this, because you have not your champion by to help you out.

Therefore let us take the compound before fluctuation, while the man has all his limbs and senses entire. In this state I suppose the whole composition, not any part, nor any number of parts less than all, is *You*: so that what the composition does, you do; and, *vice versa*, whatever is done by

you is done by the whole composition.——You are right.——Pray do you hear me speak?——Why should you ask? have not I answered you all along? ——I am not sure of that: Something has heard and answered me all along very clearly: but I am in some doubt whether that was *You*; because it seems to me not to have been your whole composition. Did your eyes hear any thing of what I said?——They helped to understand you, by observing your gestures, and motion of your lips.—Probably they might: But had your nose or the nerves of your legs or arms any share in the hearing?——There was no occasion: for I have ears good enough to perform the office of hearing without other aid?——So your ears, or if you please to add eyes, have performed the whole office of hearing and understanding; and I have been talking all this while, not with your whole composition, nor with *You*, but with a pair of eyes and ears.——Pshaw! now you joke with me. And let me tell you, this does not sit so easy upon you, nor appear so little forced as your argument. Can any body deny that what my ears hear is my hearing?—I deny or affirm nothing; I only ask, whether what your eyes see, and your ears hear, is seen and heard by your whole composition?——I think it is. I am sure it is seen and heard by *Myself*: for I have no notion of one Self to see, another to hear, another to smell, and so on; nor of half Myself seeing when the other half does not. But to my thinking a perception received at any one part runs through the whole Self, the whole composition.—Does it so? When you look at a picture, does the sight of it run down to your great toe? and when some body treads upon your toe, do your eyes instantly feel a sympathetic smart?—I am sure it is the same *I*, the

same *Self*, that see the one and feel the other.—— Then if you have but one Self to serve you upon all occasions, and this Self cannot perceive by halves, must it not be something distinct from the nerves and organs, which alternately remain insensible of one another's perceptions? And is it not rational enough to suspect, that these organs are only channels of conveyance transmitting their respective notices, as windows transmit the light, to the same Self, the whole of which perceives every thing that is perceived?——O! for Mr. *Monthly* again, to stand by and see my head broke! But supposing it were so; may not this *Self* be still a compound?——I am afraid we shall hardly be able to make a palpable individual compound of it: so we have lost our existence already; for nothing it seems exists that is not so, nor is there any thing individual unless compounds. Nor do I much care: for, so we can find pleasure in one another's company, it is no matter whether we find it with existence or without. But what do you take this compound to be?——Truly, I don't very well know: but suppose it to lie somewhere in the brain. We are told the nerves have been traced to the pineal gland: perhaps there may be a drop of the fifth element; or spirit of man, gathered there; and then that is the *Self* whereto the personal pronouns belong.——

Do you apprehend yourself to be a real Being, or only a dream, a mere fancy or imagination?—— I cannot doubt of my existence, so long as I have my senses.——The having your senses depends upon your having sensitive organs, which we have now agreed are no parts of you, therefore are separable from you. But upon such separation should you lose your Being, because you lost the

knowledge or consciousness of it?——No, provided the drop remained entire.——Suppose the drop, without being ever dissipated, should get into the pineal gland of another human body, should you regain your knowledge and consciousness?——I should know I had a Being, but not that I was the same Being and Person I am now, because probably I might not remember any thing passing with me now.——Well, but tho' you might not know it, should you not really be the same Person and Being?——Certainly: for the drop being Me, while that remains the same, I must be the same.——So the Being and Substance of the drop are your Being, which you undoubtedly know you possess, while you have your senses.——They are——And the materials of the drop are your materials.——Yes.——Do you and the drop make two Beings?——No: both are one and the same.——So while the whole drop continues to subsist, you subsist.——I do.——But the drop may be divided into two half drops.——Ay, and those again into infinite parts; for Matter is divisible *ad infinitum*——With all your divisions, can you ever reduce it to nothing?——I do not pretend that.——Is there not the same substance or quantity of matter in the two halves as there was in the whole drop?——To be sure.——And after their being divided into infinite parts, is there not still the same quantity among them all?——I agree it.——Then none of your substance being lost, you still continue to subsist, notwithstanding an infinite dissipation of your parts——My Substance does; but not Me.——Why so? Are you any thing else than the substance whereof you consist?——Yes, the union of it into a compound is necessary to my subsistence.——Is Union a substance?——I never said it

was.——Can it make a substance?——It may make that to be one which was many before.——Is that one any addition to the number there was before union, or has it any other existence besides or over and above theirs?—

It does not to the number of substances, but it has an existence besides theirs.——How do you make that out?——Because, in common propriety of speech, we apply existence to the composition distinct from the substances compounded.—In what instances pray?—Some people deny there is any such thing as a circle existing in nature; for what appears such, they say, is only a Polygon whose angles are imperceptible. Now when they say this, they do not mean to deny the existence of the bodies seeming to be circular: and if they admit the existence of squares and triangles, these are different ideas from that of the substances existing in them.—Different ideas they may be without being different existencies: for composition may still be no more than a particular mode of existing in substances, upon their coming into union from being dispersed. And it is not necessary that, upon their being cast out of a triangle into a square, there should be an existence lost and gained, but only that they change their manner of existence, which, whether in square or triangle, is still their existence, not that of any thing else.—Still, in my apprehension, when a thistle grows out of the ground, there is a plant in being which was not existent before.—Well, if you make a difficulty, we do not love contesting where it is needless. We will suppose Composition to have an existence distinct from the substances compounded.—Thank ye, for your indulgence: tho' I am afraid

you would not grant it, if you thought it would do me any good.—It could do you no good to deny it. Upon this supposition there will arise a new question, What is properly You, and your Existence? for you know you have one of some sort or other: whether it be the existence of your composition with that of your substance jointly, or the former alone abstracted from the latter.—— Stay; I must think a little, this is not a matter to be determined presently.—Nay, if you are not clear, never stand to puzzle your brains about it. For which ever way we take it, our argument will run the same: so we will try with the Composition, considered apart from the materials united by it.—Take your own way, since you say both will conduct to the same point.—Lay down a brass quadrant upon the table: I suppose you will allow it has a composition existing distinctly from all other compositions.—Very readily.—Place another equal quadrant of silver by it. Has not that a composition of its own existing too?—Certainly.—Does it destroy the composition of the other?—How can it affect that, only by being laid side by side by it?—Put two other quadrants of steel and copper against the former: Have not the four so many distinct compositions existing in them?—No doubt they have.—But all together make a compleat circle.—True.—Has not this circle a composition too?—Undoubtedly.—Is the composition of the circle any thing else than an aggregate of the four compositions in the quadrants?—Nothing else, that I know of.—Now let us return to the human body. Has not your right leg a composition of its own distinct from that of your left?—It has—And your right arm another?—Yes.—And your nose another?—To be sure.—And every part of your

human frame a separate composition of its own.—I cannot deny it.—But we discovered before, that the parts I have named were no parts of *Yourself.*——We must not retract that:——So your existence lies in the composition of the drop or spirit of man lodged in your pineal gland.—It does.——Which drop may be divided into two halves.——It may.—And each of these halves into three hundred subdivisions.—Ay, so many at least—And matter being divisible *ad infinitum*, each of these subdivisions are compounds having a composition existing in them distinct from all the rest.—Admit that they have.—Then is the composition of the drop, which is *You*, any thing else than the aggregate of the six hundred compositions in the subdivisions?—It must be so: *Plato*, thou reasonest well.—So now we are come to the regiment again. This plaguy troublesome foe pursues us to whatever quarter we can turn, and drives us to a concession, that we have no better title to existence than itself; and it appears in all lights that you have no distinct Being of your own, being nothing more than a regiment or collection of infinite substances or existencies; and upon the disbanding of them, tho' you cease to be, yet there is not a Being, a Compound, a Composition, lost out of the universe.—Yet for all that I cannot help thinking, that upon my ceasing to be, there must be one Being the fewer in the universe: so I shall suppose, that so long as the substance composing me subsists, however dispersed or dissipated, I shall subsist.

But this will avail us little: for bare existence without perception is of no value; and when the particles fall out of their union and intercourse with one another, they cannot form a perceptive compound.—That's a great comfort, no doubt.

But supposing any of them could see, or hear, or feel, while you subsist, and they continue to be parts of you, tho' dispersed to great distances; should you be insensible of their perceptions?—Supposing that, I must be affected with what affects any of them: but this is an impossible supposition, because they cannot perceive unless in composition.—But after being decompounded they may come into composition again.—Possibly they may.——The elements perpetually fluctuate and change: so what is now spirit of man, may become spirit of brandy, and in further process of time may become spirit of man again, either in one composition, or interspersed among several drops gathered in several pineal glands.—I cannot deny the possibility of this.—Then in this state of composition they will all be perceptive, but probably have very different and contrary perceptions; some seeing while others do not see, some being in pleasure while others are in pain. And as you must be affected with whatever affects them, you must then have these contrary perceptions at the same time, and enjoy pleasure while you suffer pain.—— I can't tell how to come into this notion tho', that I may see and not see, be in pleasure and pain at the same instant.

You know the almighty power of Chance, and how in the course of infinite ages she must produce all possible combinations. Now one possible combination is this; that some thousands of years hence half your drop and half mine should join in one pineal gland, and the other halves in some other pineal gland. Will these two compounds be persons having knowledge of their own existence?—I make no doubt of it.—Will they be distinct and different persons from one another?—Certainly.—

Which of them will be one of us?—Neither.—Do not we subsist so long as our substances subsist; and shall not we perceive whatever they or any parts of them perceive?—We agreed so just now; not in liking to the hypothesis, but because drove out of every other.—Shall we have any other substance, or existence, or perception, than what belongs to those two persons?—And yet I can never bring myself to believe that I can become another Person, or part of another Person, or perceive by his perceptions, much less by the perceptions of two.———

So long as you continue alive, I suppose, you are the same Person you were some years ago. You can agree to this without being drove out of all other hypotheses.—Very readily.—Nobody can doubt that.—The same Being, Existence, or individual Substance.—Certainly. And the same individual Compound too.—Do not the humours of our body continually fluctuate and change, being first secreted from the blood, then entering into the substance of our flesh, and afterwards flying off by perspiration?—One cannot be ignorant of this, without great deficiency in physiological knowledge.—Is it not rational enough to suspect from analogy, that the spirit of man (if it be a fifth element, or material fluid) fluctuates in like manner; being first secreted from the animal spirits, then turning to the medullary substance of the brain, and afterwards flying off by perspiration? —Truly there is a shrewd suspicion of such analogy.—And as the particles of this fluid are detached, others flow in to supply their places; so that there may not be one particle the same that was there some time ago: but what is now spirit of man in you, once was blood, or chyle, or victu-

als you have eaten, and perhaps a twelvemonth hence may be vapour floating about in the air; yet *You* continuing all the while the substance and person.—I don't know how to disprove all this.—Then if *You* are a real Being and substance, and are not barely a form or mode of existence in something else, and if your Existence and Personality remains the same throughout all the stages of life, from infancy to extreme old age, notwithstanding all the changes of particles in your drop; may we not argue, as we did before, concerning the nerves and the organs, that they are no parts of *You*, but channels to convey perception to something else, which is numerically and substantially *Yourself*?—Well, I'll say no more, but turn you over to my champion.

Thus which ever way we turn ourselves, we find nothing but absurdity and contradiction, so long as we place our existence and personality in a compound: nor can we escape them otherwise than by admitting an Individual, not one of your compound individuals, which is none at all except in idea, but an Individual truly such, consisting of no parts; that cannot either totally or partially become another substance, nor can lose its identity unless by annihilation: in which case there would be a Being absolutely lost out of Nature, that is, out of the number of Beings existent. Into whatever composition this Individual enters, we esteem it *Ourselves* for the time, notwithstanding any fluctuation of its parts; provided they fall into the same connection, and serve the same uses their predecessors had done before.

According to the form and texture of these compositions, we conceive physical Beings denominated: so we are orthodox in this article of phy-

siological faith. But we are reproved for misapplying the term *Man* to a part of him; because we observe, that no man can doubt of his own existence, and a little after place that existence in the mind, which is an individual that can be divested of its Being by no power less than that which gave it. What then? has not the Man such a Being if his mind has it? May not we say a Man has a fresh colour, because he has it only in his cheeks; but none in his arms or his back? So the dispute turns upon a point of language rather than of physiology. For surely nobody can understand us to imagine that when *Rice* was hanged, he was not divested of his Manhood, or did not cease to be a Man. The sole question is, Whether the term *Man* may, upon any occasion, be applied to either of his parts after their separation. Suppose his body had been hung upon a gibbet in the little green near *Stamford-hill*, if on going along the road in dusk of evening with a friend, as my eyes are not very good, I should ask, Pray what is that sticks up in the middle of the common? Is it a tree? And he should answer, No: it is a Man hanging in chains. Would he be guilty of false language in his answer? Or suppose I ask *Whitfield* what he thinks is become of him: and he tells me, "Such a wicked Man, not having received absolution from me, to be sure is gone to the Devil." Must we call this an impropriety of expression, merely because we are pretty sure the Devil has not got both parts of the palpable Individual yet?

With regard to Agency, we hold, as appears by Note (b) on page 31, that in every human action the mind acts upon some corporeal organ or instrument, and having many of them under

command, she can by employing them respectively affect things external, as when we take up a book; or the body, as when we wipe our face; or herself, as when we recollect some past occurrence. All which actions are ordinarily ascribed to the Man: for we say the Man thinks, the Man wipes his face, or the Man takes up a book. But if the term *Man* belongs only to the palpable compound, it must include the whole of it, and cannot be applied to the mind, even together with some of the limbs and organs exclusive of the rest; so that the Man neither walks, nor writes, because in the former his hands perhaps hang dangling by his side; in the latter, his legs, like a couple of lazy curs, sit doing nothing under the table. If we are to be held to this rigorous physiological dialect, perhaps no Man ever did a single thing in all his life; because it would be difficult to assign any action whereto some parts of his composition were not wholly useless and unconcurrent.

As to the adverb *alternately*, I don't recollect where we have employed it: but if we have, I see no great harm done. Possibly Mr. *Monthly* takes a pipe sometimes, while sitting, like Fate, over the new-born babes of literature, to spin their future fortunes in the temple of fame. He whiffs and thinks, and thinks and whiffs again. In this case, might not we say the Man acts alternately. Sometimes upon his mouth to draw smoke into it, and sometimes upon his *Pericranium* to raise ideas there, now and then a little smoky too? or should we say, the mind acts upon the pectoral and guttural muscles, they act upon the fuming weed in the tube, the exudations of that stimulate the sensory nerves in his palate, these communicate their motion to the brain, which acts upon the mind

again, by raising up judicious observations for her to contemplate? Would this learned style tend more to the entertainment and edification of our readers?

If our language in all these particulars has been incorrect, it will be good-natured in him to set us right. In the meantime, as a man that makes awkward bows must go on with his awkwardness until his dancing-master can teach him to perform more genteelly; so we may hope for indulgence in our vulgarity of expression, until our master shall instruct us to deliver ourselves with better grace and elegance.

We have spent many more words in our defence than were employed in the attack; but it is always the case, that less trouble is requisite to puzzle a cause than to clear it up, and a man may make more tangles in a fine skain of thread in a minute than he can undo again in an hour. We did not undertake it for the sake of our own credit, which has been much more raised than depressed by the labours of our good cousin, Mr. Monthly Comment, who has said so many handsome things of us that it would be vanity to repeat them; and a few freedoms ought not to be taken amiss, as they shew an impartiality that adds weight to what has been said in our favour. It is common to see two counsel fight like dog and bear at the bar, without thinking the worse of one another, all the while their strenuousness encourages clients: so our making a little noise with one another may turn to mutual account; it may serve like the market-bell to awaken the curiosity of customers, and quicken the sale of both our wares. This benefit, if it accrues, we shall be heartily glad of, in gratitude for the high

encomiums bestowed on us; yet we own it will be purely accidental, for what raised our solicitude was the doctrine advanced of the mind and material elements fluctuating and changing into one another; which seemed a revival, though we are willing to believe it was not intended as such, of the old atheistical notion, that a perceptive and active being might be formed of inert and senseless principles. This seemed a matter of importance to us, well deserving our serious care and endeavours to prevent; and engaged us to a replication, which, upon all other accounts, we should have judged needless.

THE END.

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